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JUNE, 1883.

THE PECULIAR features of the weather during the past winter have been exhibited through the spring—a quite uniform low temperature, and a rain fall of less than an average amount. So far as fruit is concerned, this condition has been favorable, though more rain has been desirable. At this time our fruit prospects are good, but we are yet to pass a very critical period. What our summer may be none can foretell, but it may not be unprofitable to consider now what course might be best to pursue if visited by a drought. There is one operation that admits of very general practice in such an event, that is mulching. It is especially valuable for newly planted trees and shrubs, and of these there is a full share the present season, as the nurseries throughout the country have made large sales. What share of all this planting will be alive in a year from this time? The first summer is the trying time, and a large number of those still alive at the commencement of winter will be dead at its close. Without a vigorous growth the first summer, a tree will be almost sure to fail by the cold of the following winter. Mulching in a dry time is a great preventive of its ill effects, preserving moisture in the soil, and thus almost ensuring a growth. But in the hands of some persons newly transplanted trees and shrubs can rarely, if ever, escape a

drought, though the heavens be ever so propitious with showers, for they make the drought specially, though unwittingly, for these nurslings in their care. It is done by setting the trees with all their branches and small limbs left on, just as they grew. As soon as the warm sun calls out the leaves from the buds, they begin to evaporate the moisture in the wood cells, which should be kept supplied by the action of the roots; as the young rootlets are not yet formed there is no response to the demand from the leaves, but the latter keep on evaporating the moisture until the stock is pumped dry. If you have committed this error this spring, go at once and remove most of the branches from your young trees, cut away all but a few inches of last year's growth. Evergreens do not admit of cutting back, and for them, when newly set, mulching will be found of great value. One of the best materials for mulching is grass, and it is always at hand. Frequent stirring the soil is of great benefit in a dry time; then the cultivator and hoe should be kept in motion.

We advise all who have the opportunity to use the water of streams and ponds, and have not done so, to make a trial of irrigation on a small scale in the garden. The market gardener, or the grower of small fruits, who might have such facilities, by taking advantage of

them would be able greatly to increase the amount and value of his products.

The growth of Grape vines will henceforth be rapid, and they will need care to keep the shoots tied up as they advance, and to remove those that are superfluous.

The lateness of the season causes much of the bedding out of tender plants to be done this month, and it may be well to be prepared to protect from cold nights, since we know it is a trait of the weather to take a cold, low dip occasionally.

The young plants of annuals should be given all necessary care in cultivation to bring them forward as rapidly as possible, for their time of blooming is none too long, and they add greatly to the lively appearance of the garden.

In the vegetable garden late sowings of Peas can be made, and many other vegetables may now be re-sowed to succeed earlier crops.

CHRYSANTHEMUMS.

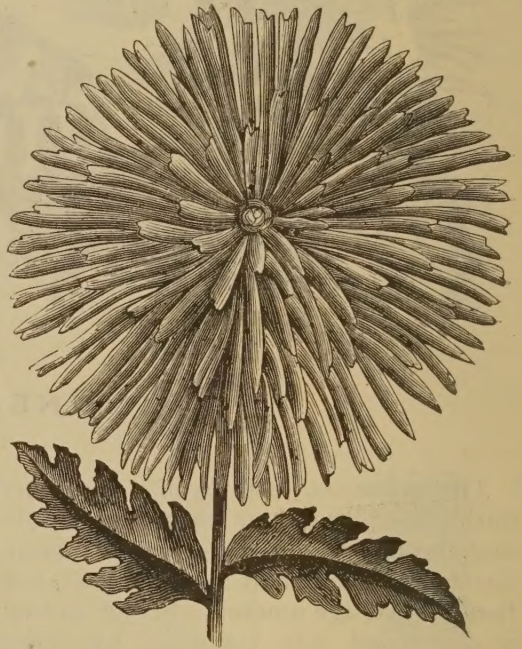
Looking at the illustrations here presented of characteristic forms of Chrysanthemums derived from three adjacent countries of the East, China, Japan and



CHINESE CHRYSANTHEMUM.

India, the question is suggested, why this plant should take these three peculiar forms. Is there anything in connec-

tion with each country that makes its own form better adapted to it? Is it the result of nature unaided, or of human art? Are the natural and unimproved forms still to be found growing in those countries in a wild state? Have these forms been selected and cultivated and intensified in national rivalry? Possibly



JAPANESE CHRYSANTHEMUM.

eastern literature may yet answer some of these questions, but at present we only know the fact that the plants of Chrysanthemum, derived from the three sources named, have the forms that we now strive to indicate. To be sure, it is known that the Chinese varieties are derived from the species called *C. sinense*, and the pompon varieties from *C. Indicum*, but the origin of the Japan varieties, we believe, is somewhat obscure. And how remote may have been the common origin of all three? The figures of the Chinese and the Indian, or Pompon, Chrysanthemums are about the natural size usually seen, but that of the Japanese is not more than half size of many varieties; many of the latter are also much less regular than this specimen. The plants of the Pompon varieties are not as large as the others, though they bloom as abundantly.

All varieties of these Chrysanthemums are amenable to the art of the cultivator, and the plants can be fashioned at his will; perhaps no plant will better display the care and ingenuity expended upon it

to give an ideal form. Compact, well-furnished plants are most desirable, and this is effected by potting in rich soil, in pots of medium size and pinching back the growth as it progresses, to increase



POMPON, OR INDIAN CHRYSANTHEMUM.

the number of branches. When it is time to allow the buds to form for blooming the pinching in must cease, and with us this is about the first of August. The strength of the plant is maintained while blooming by a liberal supply of manure water.

The varieties of Chrysanthemums in cultivation are very great, and new ones are introduced every year. Many of these are not better than older ones, but on the whole there has been going on for a long time a gradual improvement, consisting in greater fullness, truer forms, and clearer and more distinct colors. Great size, looseness and gracefulness of petals, and brightness of color are characteristics of the Japanese Chrysanthemums. Altogether the variety afforded will satisfy all tastes.

A MODEL ROSE.

With almost innumerable varieties of Roses now in cultivation, we witness every year a large number added to the list by enterprising horticulturists of England and France. Fifty or a hundred years ago, cultivators were almost contented with their Cabbage Roses and Sweet Briars, and the comparatively few

varieties that graced their gardens. But since the grand improvement, from a florist's point of view, has commenced, there seems to be no stopping place where we may contentedly rest and admire with satisfaction the results attained without longing for something still better. The possession of such a Rose as *La France* only increases our dissatisfaction with all that has yet been done, as it shows more clearly what may be accomplished. This Rose combines in a high degree some of the most valuable and desirable qualities. It is a hybrid Tea variety with a remontant parentage on one side. It is hardy in our climate, or as much so as most of the Perpetuals, blooms freely in June, and were it not for the great heat of the later summer months, would, no doubt, produce its flowers freely and continuously. As soon as the heat begins to abate it again commences to bloom, and continues without intermission through the fall until frost destroys its foliage. The specimens from which our colored plate was made were cut on the fourteenth of October, last year, and at that time there was an abundance of bloom. The silvery lustre of this Rose gives it a peculiarly soft and pleasing appearance; add to this its sweet fragrance, its vigor and hardiness, and we have such a combination of the most desirable qualities that is found in no other variety. Valuable as are the varieties that compose our list of Hybrid Perpetuals, it is plain to see how willingly we would exchange them all for others, in variety of colors, that would compare with *La France* in its various excellencies. Not until this goal is attained can the rivalry in the production of new varieties cease.

Rose-growers are now about to witness the great annual display of the Roses hardy in this climate. It will be well to be prepared with whale oil soap for the leaf slug, and to be watchful for the Rose bug. If there is any doubt about the richness of the soil it is not too late yet to manure. The best course to pursue, if possible, is to remove the soil to a depth of three or four inches above the roots of the plants, and spread in some well-rotted stable manure, and then cover with the soil; it will make itself almost immediately felt, and will greatly increase the size of the flowers.



CARLUDOVICA PALMATA.

THE PANAMA HAT PLANT.

One of the most interesting of the Palm-like plants, suitable for the decoration of the conservatory and window is the Panama Hat Plant, *Carludovica palmata*. It is a native of Ecuador, Peru, New Grenada, and other tropical countries of South America, flourishing in the damp and warm forests. A warm greenhouse is well adapted to its requirements, but when not in actual growth it can be removed for a few weeks to serve as an ornament for the table or window. Its erect and noble appearance does not fail to arrest attention and excite admiration. The spread of the leaves is from one and a half to two and a half feet, while the leaf stalks are from five to seven feet in length. The fan-shaped

leaves, if kept free from dust, are of a brilliant green, and altogether the plant has a most commanding bearing. The leaves of this plant are used by the inhabitants where it naturally grows to manufacture the hats so well known as "Panama." It is said that the leaves are gathered in the bud while yet closed together like a fan, and while scarcely tinged with green. The leaves are then prepared by stripping them into fine shreds and afterward steeping them in boiling water, and in water acidulated with lemon juice, and in cold water, and then dried, when the process of bleaching is completed. It is customary to make a hat out of each leaf. The fine hats often require several months to complete, but the coarse ones are quickly made, and sell at a low price.



A MAN AT WINDOW GARDENING.

The care of plants, and especially flowering plants, either in the window or garden, is usually left to the women and children. This may be well enough as a rule, but is not exactly according to my own taste and inclination. Since my early boyhood I have loved plants and their culture, and now at the age of fifty-eight I find that love as strong as ever. Though my wife and daughter probably love ornamental plants and flowers as dearly as I do, while they do not object, I prefer giving the chief attention to their culture myself, both in the garden or yard and in the house.

Perhaps your readers would like to hear what success a man can have at window gardening away out in Minnesota, and this, too, while engaged every day in active practice as a physician. Though the past winter has been very cold, the mercury frequently running down to 30° or 40° below zero, we think our window plants have done remarkably well, and they are still thrifty and blooming. We have kept about one hundred and twenty-five plants, but a part of these were always resting in the cellar. From eighty to one hundred plants have been kept at six common windows in four different rooms, all heated by one coal stove. Those requiring most heat were placed in the sitting room where the stove stands, and others arranged farther away, as their needs seemed to require.

A part of the Roses were early placed in the cellar to rest, while others were kept in vigorous condition for early blooming. Thus we have had Roses all winter. The *Hermosa*, *Saffrano*, *La Pactole*, *Duchesse de Brabant* and *Douglas* have proved almost constant bloomers. We have two others, the *Gen. Jacqueminot* and *Niphetos*, that have not

bloomed during the winter, but the latter has now (April) more than a dozen buds.

Our Primroses have been in constant bloom, so, also, our favorite Geraniums. I say favorite because the *Bishop Wood* and *Asa Gray* are decided favorites.

Our *Callas* have done remarkably well. I must tell you something about the *Callas*. Last spring, having a *Calla* growing in a common wooden pail, I plunged it during the summer, and in September found the pail literally full of fine roots. I divided the plant into three parts and trimmed the roots; gave one of the plants to a neighbor and put the other two into four-quart tin pails. These were set in shallow tin milk pans, and both pails and pans kept filled with warm water. Fifteen blossoms during the winter has been the result.

The *Ranunculus* and the *Anemones* came into bloom about the first of March and are still blooming.

One of our *Gloxinias* came into bloom as late as the first of November and continued until the first of December. Perhaps with a little tact we could make a winter bloomer of the *Gloxinia*.

Hyacinths and *Narcissus* never did better. *Fuchsias* a little late, but are loaded with bloom now. I train them to bend downward and they are much admired.

Our foliage plants, chiefly *Coleus*, were kept in the stove room, and have been its beauty and glory all winter. *Abutilons*, *Begonias*, *Oxalis*, *Carnations*, *Salvia splendens* and *English Ivy* have done equally well, affording both foliage and bloom in abundance.

Thus we have made our home beautiful and happy, even in this cold climate, with very little effort and not a particle of trouble. A few moments of tender care from loving hands, each day, is all they require, and they repay a hundred fold.

Besides the pleasure of beholding them, we have had the pleasure of giving for parties, weddings, funerals, &c., and feel that every influence of these beautiful window plants has been cheering, refining and helpful.—D. H. K., *Owatonna, Min.*

AN OLD MAN'S RAMBLE.

To a thoughtful and contemplative mind there is nothing so interesting as a walk among the wild forms of natural beauties, beholding the wonders of vegetable life. It is a noble employment, and studying the book of nature we may see and admire the wisdom and goodness of an unseen Architect in every leaf and flower and fruit. What can be more pleasing to a thoughtful mind than to direct the attention to the endless and ever changing forms of plants. CHRIST loved flowers and talked about them. At the first, "God said, let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself upon the earth; and it was so." And he who does not see His goodness in these productions of beauty and utility that surround us every where is a stranger to the best affections of the heart. Often have I stood in some dense avenue or dell, and cast my eyes around on the variegated scenes of nature, and been filled with amazement and wonder at the boundless and limitless wisdom of an infinite Creator, until my soul was filled with adoration. Being now incapacitated for business, but, considering my age, having good health, when the weather is favorable I occasionally have a stroll in the country, along the lanes and through the woods, and amuse myself by collecting wild flowers and plants, bringing some home for closer examination.

On one or two of the bright days of March I collected some early spring flowers, such as the following: Sweet Violet, with its modest, purple flower, having five petals of unequal size and shape, the lower one being drawn out into a kind of spur. The *Anemone nemorosa*, or Wood Anemone; this is one of our commonest and prettiest of our spring flowers, and here, in Georgia, we meet it early in March; these simple delicate white flowers with three compound bright green leaves are beautiful, as they stand out from among the dead brown

leaves which cover the ground; they are harbingers of spring. *Vinca minor*, or Periwinkle, creeping along the ground, with its short flowering stems ascending, bears bright blue flowers and ovate shining leaves. The plants live together in colonies and seem to smile at passers by. *Sanguinaria Canadensis*, or Blood-root, bears a handsome white, many petaled flower, with a palmately-lobed leaf wrapped round the flowering bud; it often stands alone like the morning star. In cutting the root we find it as red as blood, whence comes its name. In the shady wood I found a plant I have not met with before. I brought it home and found it to be *Trillium sessile*, or Wake Robin, with its dark purple, sessile flower, and all parts of the flower are in threes, and its three blotched dark green leaves are sessile. *Podophyllum peltatum*, May Apple, or Mandrake, has a seven-lobed, umbrella-shaped leaf; in some plants the stem is parted into two, with a leaf on each, and a white flower nodding in the dark. *Hepatica triloba*, or Liver-leaf, has three-lobed leaves, and bears a beautiful round, white flower; the flowers are each on a slender stalk, the leaves are borne on long petioles rising from the ground. Some other plants and flowers I collected and brought home, and found their anthers and pistils and pollen grains interesting under the microscope. Every bud, and flower and fruit, every leaf and stem is an object of study, and while these things occupy the thoughts time passes pleasantly along. I, who have no cares of business and no duties of a family, find attention to natural objects takes away the monotony of a retired life and leads the thoughts from nature up to nature's God, and faith in his superintending care gives confidence and peace.

Yesterday I was out again to a place I had not been before, and met with three or four Ferns, but most of them are small and only a little above ground, but the *Polypodium incanum* which grows on trunks and branches of large trees, and grows all winter, but is seen only in wet weather, is rather plentiful in some places. *Aspidium acrostichoides* is very plentiful in this locality, and is now sending up its bright green fronds; some grow to two feet high and four inches broad. The pretty *Asplenium ebeneum* is also plentiful; I have collected fronds of

it eighteen inches long and more than one inch broad, and now, in March, they are three or four inches high. *Dicksonia punctilobula* is not plentiful; I found it growing by streams and rivulets; it is a delicate, lovely Fern. I brought one or two home, hoping to have them grow, but I think they will need much care and much water, for I find they grow close to the water's edge. In one place I found *Woodsia obtusa*, and I think it rare in this locality; it seems healthy, and already some fronds are six or eight inches high; it is a pretty Fern. *Pteris aquilina* grows here, but not plentifully, nor very large, but I think it has not yet made its appearance. I think there may be other species in this locality, but I cannot go far as I soon get tired.

Threading my way among brushwood and bramble, I often find it a real pleasure to be alone, surrounded with nature's beauties, especially at this season of the year, when

"All around are seen and heard
Cheering messengers of spring,
Bursting blossom, song of bird,
Insect life upon the wing.

"Verdure fresh and balmy air,
Fairer earth and brighter skies,
While the heart, with lighter care,
Feels new joys and hopes arise."

It seems to be our duty to learn all we can of nature's wonders, and as we naturally ask how they get their beauty and loveliness, we feel obliged to acknowledge that GOD is the artist and mixed the colors. How meekly and humbly they stand, as if looking up and saying,

"The hand that made us is divine."

The works of nature, when contemplated, astonish us by their variety and utility.—W. FARNELL, *Macon, Ga.*

LILIUM WASHINGTONIANUM.

One year ago last September I received four bulbs of Washington Lily from California; not knowing what to do with them I gave one to a friend, and the rest I potted and put in the cellar. In the spring following I wrote to W. FALCONER, of Cambridge, Mass., concerning them, and he directed me to plant them out and plant deep. I planted all but one and left that in a pot; those in the ground died down very early last summer. Supposing they were dead, I gave them no protection last winter, and today, April 20th, I see them coming up

looking very robust. The one in a pot is growing a little, but has a very sickly look. I write this because I have been told by many that this Lily is not hardy and should not be planted out; but the past winter was severe enough to test it, so, after this I shall plant out California Lilies.—MRS. J. D., *Alexander, Ill.*

THE "HIGH-BUSH" CRANBERRY.

This useful and ornamental bush, so well known throughout the northern and northwestern States, is very seldom found ornamenting any thing but its native swamps and hillsides, while it is well worthy to occupy a place in the grounds surrounding our finest country residences. Its excellent fruit will also warrant it a place in the fruit garden. The berries of the High-bush are but little inferior to those of the common Cranberry, which requires so much trouble and expense when artificially propagated. Although its native haunts are along the margins of swamps and small streams, the High-bush is often found growing on hilly, rolling land, and from either place it may be safely taken up and transplanted into the garden or lawn. It very often grows to a height of ten or twelve feet, but the average height is about six or seven feet. In transplanting, the smaller ones should be selected, and the tops cut away to match the roots, which will be more or less mutilated by taking up. They are as hardy as the Mountain Ash, and require no more care, after being properly transplanted, than the common Lilac; but, like all other shrubs, will amply repay careful cultivation in fruitfulness and luxuriance of growth.

In their wild state, while crowded among other bushes, they are inclined to grow up tall and slim, but this defect may be overcome by careful pruning, and when once a good top is obtained they form a handsome addition to any lawn, especially when loaded with their beautiful brilliant red berries. I have set them out among my Gooseberry bushes, which arrangement serves a double purpose; the Cranberry tree providing the necessary shade for the Gooseberry, and the Gooseberry bushes, in turn, protecting the roots of the Cranberry. We find this way of raising our own Cranberries much less expensive than the plan so often advertised of preparing a piece of

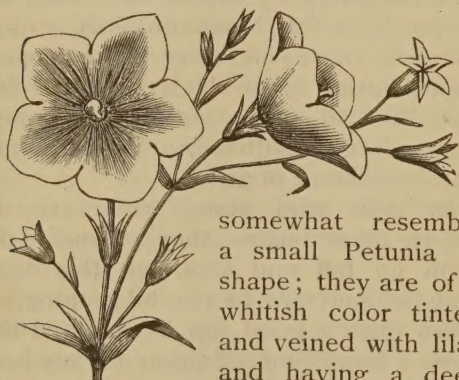
suitable ground for the cultivation of the running vine. I still have the relics showing a failure in such an attempt.

It would probably be as well to move the plants in September, but I had good luck with mine which were taken up in May. It is a good plan to give them a little of their native mold to start with, and if calculated for fruit they should be regularly mulched, if possible, with leaf mold from the forest, which is nature's own mulching. Coarse muck is good, but should be covered over with half rotten straw. Constant mulching is much better than constant cultivation, for it leaves the roots undisturbed, and also prevents them from becoming sod bound.

—W. D. BOYNTON, *Shiocton, Wis.*

NIEREMBERGIA.

Nierembergia frutescens is a charming little half hardy, perennial plant, belonging to the natural order Solanaceæ. It is a native of Uruguay, whence it was introduced in 1831. When well grown it is a pretty little plant, well suited for either the greenhouse, flower border or for bedding purposes, and it is much prized by some as a basket plant. It grows from six to ten inches in height, and produces its flowers in the greatest profusion from June until October, while large plants flower freely in the greenhouse during the early spring months. The flowers



somewhat resemble a small *Petunia* in shape; they are of a whitish color tinted and veined with lilac and having a deep purplish blotch in the center. The *Nierembergia* is a plant of easy cultivation, requiring a light, loamy soil, and in the winter season a temperature of 45° to 50°, and if at all possible a light, sunny situation. When growing in the flower border give a rich, deep soil, and copious waterings during severe drought. Propagation is effected by cuttings of the half ripened wood, and if the young plants

are wanted for the flower border they should be struck early in February, so as to obtain strong plants before they are planted out. It can also be easily raised from seed, which should be sown in gentle heat in a pot or pan of light soil, from March to the end of April; sow thinly, and cover slightly, and place in a warm, light situation, keep moist. When up, place close to the glass, and as soon as the young plants are strong enough to handle, transplant into shallow boxes, two or three inches apart each way, keep close and moist until well established, then gradually harden off, and plant out when all danger from frost is over. The seed can also be sown in a cold-frame in April, but the plants will not flower so early. On the approach of cold weather, take up half a dozen or more plants, place them in moderate sized pots; these, if well trimmed early in February, will soon supply an abundance of cuttings. This *Nierembergia* is an excellent plant for the window garden in sunny situations, as it will flower freely and is free from all insect pests. When used as a bedding plant, place the plants ten or twelve inches apart each way, in order to ensure a fine display of flowers.

The generic name was given in honor of J. E. NIEREMBERG, a Spanish Jesuit, to whom we are indebted for the introduction of this charming little plant.—CHARLES E. PARNELL, *Queens, L. I.*

GARDENING AND GARDENERS.

Among other things this century is distinguished for is the wonderful revelations of science as applied to horticulture, and the immense increase in the collections and the beauty of fruits, flowers and vegetables. Horticulture has had, during the past eighty years, the patient study, patient research, and concentrated knowledge of some of the greatest minds of this remarkable age. Such men as DARWIN, CANON HALES, LINDLEY, DE CANDOLLE, POECHET, REICHENBACH, and others have revealed phenomena, wonders of construction, circulation, transpiration, hybridization, &c., never before even dreamt of; wonders that still strike many hearers with amazement and incredulity. And while these patient philosophers and scientists have been diving into and revealing the secrets of the

plants around us, VEITCH, BULL, WILLIAMS, VANHOUTTE, ANDRE, BENARY and others have been sending their collectors from clime to clime, from the lowest valley to the highest snow-line of the mountains in search of new seeds, roots and bulbs; and at home, by careful selection and hybridization, they have been year by year giving us old friends under new and more perfect faces. Others, again, have turned their attention to the improvement in heating, ventilation and erection of the houses wherein to grow the wonderfully increased collection, until the houses of to-day are as far removed from the houses of fifty years ago as are the plants that are grown in them.

There has also been a change in gardeners since the old time when SCOTT took the likeness of Andrew Fairservice, although, I am sorry to say, there are very many of to-day with just the same grasping, speculating spirit. Whoever would be a competent gardener in this latter half of the nineteenth century must be a man of parts, or, as Mrs. BROWN hath it, he must know a little of everything, besides knowing a great deal of something.

A competent gardener must be a good English scholar, besides knowing a little Latin and French, or there will be a sad mess among the names of his plants, both in writing, spelling and pronunciation; he should be neat and gentlemanly in person, of good address, strictly honest, sober and trustworthy; he should know something of land surveying and civil engineering, so as to give plans for all new work or alterations in the gardens, from root-house to a range of plant houses, from a simple bed or walk to a complicated parterre, or a new place of fifty acres, and be able to superintend the whole work; he should be able to manage his machines and heating apparatus intelligently; he should know somewhat of the properties of plants, soils and manures, so as to give each class of plants the soil, &c., best adapted to its perfection of growth and well being; he should also be posted in plant physiology and geographical distribution, and, if possible, know the natural habitat of each plant under his care, if he would be a successful cultivator; he should be a good colorist so as to arrange plants, fruits and flowers artistically, besides knowing the

best varieties of fruits, flowers and vegetables adapted to the particular locality he may be in, and the requirements of his employer's household, and be able able so to manipulate them as to have an abundant supply the year round; add to this a meek disposition, to take the annoyance of other servants without complaint, and a cast steel constitution to stand the night and day work, winter and summer, and you will have a pretty good idea of a competent gardener.

Such a man ought to own a good library, and be able to spend at least twenty dollars a year on periodicals and journals related to his art, if he would keep up with the times, as he ought to know what is doing in the gardening world both here and in Europe, what new plants are introduced, and whence, and be well posted on many subjects of relative interest to horticulture.

What wages ought our competent gardener to receive? In Canada they get little more than common mechanics, four to five hundred dollars, with house and vegetables, being considered good wages; and considering a gardener has frequently to be up night after night, for weeks together till long after midnight, as well as do his duty during the day, it is not mechanics' wages.

But, you will answer, "the majority of gardeners do not know so much as that." Granted; but they are only what I term gardeners, not competent gardeners. Very few of this class have served an apprenticeship to gardening, and, even if some of them have, they have not scholarship enough ever to be competent gardeners. I have known many of them in the old country, good plant and vegetable growers, and in places where they keep a man, or even two, were all that could be desired; but I never knew one of them succeed when placed in a larger field of labor. What they have seen done, and plants they have seen cultivated, at places where they have been subordinates, they can manage, but with any thing beyond this they are at sea, and generally come to wreck. But even these men, as a class of gardeners, are not valued as they ought to be, nor do they receive wages commensurate with their labors, because a large number in this class is recruited from the lower ranks of of field and garden laborers, itinerant

gardeners, handy men, and coachmen gardeners, and others who go cheaper than the real gardeners, and persons who engage them find out too late that they are only pseudo-gardeners. Thus they bring the whole profession into ill repute, causing death and destruction wherever they go, and leaving a legacy of disgusted, distrustful employers and sickly plants. What is the remedy for this evil? In the old country it is pretty well managed by the nurserymen, whose recommendations are required by employers. By this course there is little chance for incompetent persons getting into good places, although they do sometimes, even then. In this country, where a man can be almost anything he has conceit enough for, it would be well for employers to look well to the antecedents of those they engage as gardeners, and when they get a good man, make him contented with his place by treating him well and paying him properly, as nothing is so ruinous to a good collection of plants as change of gardener and consequent change of treatment. Employers will find it cheaper by far to carry out this rule, for when a man is happy and contented he gives his whole energies to his work, and will try to have his place second to none.—WM. HY. WADDINGTON, *Toronto, Ont.*

WHITE DAY LILIES.

There is a mystical charm about these exquisite Lilies that come to us as the crowning grace of summer. So entrancingly lovely are they, in their snowy whiteness, it seems almost a profanation to touch them. These Lilies, so pure and so daintily sweet, are preferred by me to all other white Lilies. The flowers remain open more than one day, and late in the season they remain open and in perfection for four or five days. The plants are as hardy as hardy can be, and will grow in any kind of soil, and in any place where grass will grow.

Along the north side of the house there is a bed filled in with white Day Lilies. The inner side of the bed is two feet from the side of the house, and from the outer side the ground slopes gently away, and is in fine grass. At one end of this bed an Eglantine grows, and has clambered up over the sitting room window; over

the parlor windows, in beautiful festoons, hung the graceful branches of a *Pilogyne suavis*, which grew in this bed. Here the Lilies grew in wild luxuriance, and blossomed profusely all through August and September, and with every passing breath of air the rooms were laden with their delicious fragrance.

Last summer, an old lady who all her life had cultivated flowers, came on a visit to me. In the morning, in passing through the yard, she stopped, and, looking in amazement at the bed of Lilies not yet in bloom, "what are those?" she said. "White Day Lilies," I answered, feeling doubtful whether they would receive praise or censure from her lips. "Why," she said, "I never saw so large a patch of Lilies in all my life; the leaves of my Day Lilies were not a third so large as those." I only wish she could have seen them in the fullness of their glory. Last summer, they must have sent up a hundred flower-stalks, more, indeed, I think. Some of these stalks measured thirty inches in length, and produced and perfected thirty flowers; some of the flowers measured five and a half inches in length and others six, and six and a half inches. Oh, what a wealth of White Lilies was there.

One Sunday morning, late in August, I was asked if I could cut and arrange a large bouquet of flowers for a friend within half an hour. It had rained the night before, and the grass was wet, and I should be obliged to change my shoes to do so. "No," I said, "I cannot cut flowers and arrange them in a bouquet in so short a time, but if some one will give me strings, I can gather a bunch of flowers in that time." I always cut my flowers with long stems and with a lavish hand; so I cut four or five long stems of the Lilies and two long spikes of rose-colored *Gladiolus*, the spikes were just full of flowers, then I cut some *Eglantine*, and went to the garden and got two most beautiful glowing, scarlet *Dahlias* on long, slender stems, and a pale lemon colored *Dahlia*, and a very dark, rich, velvety one, almost black, and several *Guiding Stars*. I was fortunate in finding a cluster of *Jacqueminot* Roses and a *Gloire de Rosamond*, and I was happy, too, in finding a cluster of glistening *Malmaison* Roses. Oh, how beautiful the flowers were that glad day! I fairly

flew over the garden in my eager haste to get the choicest and best.

My Pomegranate tree was aflame with its rich, scarlet blossoms; a long spray of them was quickly cut, and then some long branches of white, sweet-scented Honeysuckles. Now I had so many flowers I could scarcely hold them. A branch of wild Clematis, with its lovely greenish white flowers, hung over the fence, a temptation too great to be resisted, and near them hung several clusters of their ripened seed with plumose tails of a silvery grey; these formed a beautiful finish for the flowers. Three

of the spade, and the bed was filled up with soil taken about an old wood pile, where saw-dust and chips have been accumulating for twenty years; this soil was very rich, black and friable, and entirely free from worms and insects. Here I planted my Lilies, separating the crowns with their roots carefully, and planting them ten or twelve inches apart; I now think this distance not sufficient, and another time I would make it at least two feet each way. When placed in the bed the roots were spread out nicely and a little sand put over them, then they were watered with



long, slender branches of the *Pilogyne suavis* were added, which were held in place over the flowers by the intertwining of the tendrils; these branches were very delicate, and arranged so as not to conceal the flowers. Not a moment too soon were they gathered, and "magnificent" was the verdict of the delighted recipient of this hastily gathered bunch of flowers.

Late in September a row of white Day Lilies was planted along the front of a piazza that faces the west. The floor of the piazza is two feet above the ground, which slopes gently away. The earth was removed from the bed to the depth

warm water and the bed was filled up. I intended to have had some dry leaves thrown over the plants, but it has not been done yet, and it makes no great difference, for the plants are quite hardy. This spring I shall plant a row of white sweet-scented Violets in the outer side of this bed.

I have a few of these Lilies growing where they can receive the benefit of the morning sun for an hour or so, and there the leaves are much smaller and of a beautiful pale green, forming a lovely contrast for rose-colored, white or scarlet flowers. — ADA DARING, *The Crescent, W. Va.*

GOLDEN THREAD.

I am very much interested in the Dodder controversy. If the Golden Thread is the same as our Love Vine, and, from the description, I think it is, then I agree to all Mrs. M. B. B. has said in regard to it, except the manner in which it propagates itself. From many years of close observation I am confident the Love Vine is purely an air plant, and has no more to do with mother earth than our gray Moss. If in the spring you will examine a shrub where it grew the summer before, you will find the little clusters of seeds clinging tightly to the top branches; later you will discover the vine commencing its growth on the top of the shrub. I have found it many times when the threads were only a few inches in length. About eight years ago, I saw in this neighborhood a large Crape Myrtle perfectly covered with Love Vine, and the tree loaded with bloom. I thought it the most beautiful sight I ever saw. I asked the owner of the tree how the vine got there. She said, several years before, she had thrown a handful of the vine on the top of the tree, and every summer since the tree had been covered with it. She said the vine did not injure the tree; she had never seen a Crape Myrtle bloom so constantly and profusely as it did. There were several others as large, growing near, that did not make half the bloom. The propagation of the vine was a mystery to her, but she was positively certain it never climbed the body of the tree, and so was I, for the body of the tree was perfectly smooth, without a limb for about four feet from the ground, and not a sprout around the roots; the soil was hard and packed with the constant tramping around it of calves, sheep and horses, not even a Virginia Creeper could have clung to the body of the tree. Two years ago I gathered a few threads of the vine, placed them on a *Salvia* growing in a pot; both plants grew finely, the *Salvia* being covered with bloom until killed by frost. The Love Vine is very common here. I have seldom seen it growing on crops; farmers never complain of it. I have never heard it called a pest, every body admires it, even men who can see no beauty in flowers, and call them weeds and pests. But we have a pest here, and a most terrible one it is; far-

mers do complain of it most fearfully and say nothing on earth can destroy it. If it answered the description I would call it Dodder with pleasure; we call it Tie Vine.—S. T. R., *Abbeville, La.*

RAINY DAY LETTER.

I must think that the gardener, like the poet, must be born, not made. I have a little nephew, an intelligent and successful gardener at twelve years of age, and I know folks of fifty that cannot make any thing grow. Little GEORGIE just "took to" the garden as other boys do to marbles and kite-flying. Neither of his parents care for flowers, but he has always been passionately fond of them, and has his plant-stand in winter and his garden beds in summer. When ten years of age he made me a visit, and I was surprised at his fine taste for flowers; he found out the prettiest things in the garden at once, and was not taken with the big, showy flowers, as most children are, but admired the Pansies and small, delicate flowers. One day he said, "Auntie, I saw such a pretty little flower in the garden, but I do not know its name." And then he brought me a pink Phlox with a white eye, the very prettiest Phlox in the whole collection. I had often admired it myself.

When I get the garden fever I must dig in the dirt. This year, I began to fear that seed-time would never come, but my faithless heart at last rests on the old promise, and the seed-time again returns to earth. I have had my first day in the garden, and a most delightful day it was. And the rain is falling on my Sweet Peas, and Candytuft and Larkspurs safely planted. These cannot be got into the ground too soon. I have no luck with Sweet Peas sown later than April. They grow, but will not bloom; but sown as soon as ever the ground can be worked, they never fail. The Candytuft may be sown at intervals all along through the summer. I have had it in bloom in September. You cannot have too much Candytuft and Mignonette if you are fond of bouquets. I have Pansies sown in boxes under glass; they, too, should be planted early. The only reason that I put them in boxes is to hurry them up; they would do as well in the open ground, but not come on so fast. I do not believe in taking useless trouble

with flowers or any thing else. Larkspur seeds do just as well, or better, sown in the open ground and let alone; I never transplant the annual Larkspurs. The perennial Larkspurs may be moved without injury, but the annual varieties are difficult.

How few people get as much enjoyment out of their gardens as they might. How seldom do they ever sit in their gardens doing nothing but drawing in pure delight? I never see anybody but myself sitting in a garden. Now, of what value is a garden if one is never in it, unless when hard at work? I like to work in the flower garden when I am in the mood, but I don't call it work then; it is play to do what you really take pleasure in doing. I will tell you what I call work, dish washing, cooking, sweeping and dusting; but digging and planting in the flower garden are delightful pastimes.—JENNY DARE.

JACOBAN LILY.

Sprekelia, more commonly called *Amaryllis formosissima*, or Jacobean Lily, is a native of Guatemala. It was named in honor of Dr. SPREKEL, a German botanist. By the Spaniards of Peru it was called Jacobean Lily because of its scarlet flowers, resembling in color the scarlet swords worn by the Jacobean Knights. It is a bulb so magnificent in flower, and so easily cultivated that it is destined to become a great favorite. To put the bulb in a pot and cause it to grow and grow, as is the custom of some, it will never amount to much; but with its natural requirements adhered to nothing is more easily flowered. Potted in early spring the bloom-stalk will shoot up, and often open before the leaves have made scarcely any growth. Use good friable loam well mixed with moss for this purpose. The plant may be raised in groups or as single specimens. For forcing, the blooming bulbs may be crowded together until after flowering, but care must be taken that they have ample room for after growth. At this time they should be slipped into large pots or into the open border. If well grown, by fall the bulbs will have ripened and should be taken up and dried with the tops on, then stored away free from frost. This bulb seems to require the drying off process to do well. I have tried it in many

ways, but none suits it so well as that. It multiplies rapidly by offsets, which removed and carefully grown soon attain blooming size. Therefore, at moderate expense one may soon have on hand a supply for both pot and border culture.—AMATEUR.

A PET PELARGONIUM.

The *Pelargoniums*, commonly known as Lady Washington Geraniums, though short in duration of blooming, are so rich in colors that they stand high in my esteem. As pot-plants for the green-



house, conservatory and window garden I prize them greatly; no flowers have richer markings or brighter colors. Their blooming season is mostly in the latter part of spring and the early summer. I have had good success with them for a number of years as window plants, and have tried many kinds, but wish now only to mention a variety called *L'Avenir*. It is quite distinct from all others by peculiar markings. The two upper petals

are of a clear crimson or carmine, shaded at the base with dark markings, while stripes of white run through them, being more numerous near the edges, which, also, are more or less blotched with irregular patches of white. The three lower petals are of a bright rose color, similarly marked with white. The plant with a number of flowers in bloom is particularly bright and attractive, and as it is of a free-blooming habit, I consider it one of the most pleasing features of my window garden. I am a little puzzled about the great variety among the Geraniums, the great differences that exist between the scarlets and the Lady Washingtons and the scented leaved varieties and others. Why should they be so different? I suppose, as many times I have learned in life, that it would be plain enough if I knew more about the subject.—I. H. B., *Chicago, Ill.*

AMARYLLIS.

A few varieties of Amaryllis are here described which any amateur florist may safely handle. They are good bloomers, and form a fine collection as to habit, color, &c.

Aulica—A strong-growing variety, bulb and leaves becoming very large, flower stalks from two to three feet high, usually two-flowered, arising in succession, flowers very large and recurved; color, mingled white and rose with a bright green stripe through each petal.

Equestre is a small-growing variety; color, orange scarlet with white throat, forming a very pretty star. Very desirable as a window plant on account of its small growth and excellent blooming qualities, four flowers to the stem and usually three stems in succession.

Refulgens—Leaves short, but fully as broad and strong as any ordinary variety. Flowers bright crimson, beautifully veined, very dark throat, two to four flowers at a time.

Prince of Orange—Large-growing bulb and leaves; flowers large, white, striped and veined with orange scarlet.

Vittata—One of the most beautiful of all the light colored varieties. Medium growth; flowers rather smaller than the well known *Johnsonii*, white, with a bright cherry red stripe through each petal, slightly veined with same color.

There are many hybrids of *Vittata*, all more or less beautiful.

The above named varieties are all winter or early spring flowering, and will bear uniform treatment. Rested during the hottest weather, they are ready to bloom according as they are brought to the light and heat. If set aside it is necessary to observe them occasionally, for sometimes they will start a flower stem without waiting for the most favorable conditions. I had several do so this winter. Especially apt are they to do so if they have been well grown after flowering and not over watered at their period of rest. Too much water when resting will cause decay of roots and consequent loss of vitality. Avoid pouring water over the bulb, for moisture in the neck of the bulb will result in center rot, or if absorbed into the bulb in that manner will weaken, perhaps destroy the tiny flower scape already formed between the scales at its base. These little flower scapes are formed as the new growth is made, and the the necessity of a vigorous growth after flowering, in order to provide future blooms is apparent. The old part of the bulb has performed its mission, and the renewed bulb will prove a success according to its treatment.—AMATEUR.

OXALIS ORTGIESI.

I want to say a word in praise of *Oxalis Ortgiesi*, which is as yet but little known. A plant received in May last has thrived wonderfully, and is a very handsome bushy plant, a foot in height. It is said to grow much taller, and mine keeps on its upward way. It is a perpetual bloomer, and though its flowers are small yet the numerous clusters are very pretty. Its beauty, of course, is in the foliage, the upper side of a rich olive green, the under side deep purple. Everybody admires it, but no one thinks it to be an *Oxalis*. It does not have a bulbous root. It is a native of Peru.—MRS. M. D. W., *Yarmouth, N. Y.*

WESTERN CURCULIO CATCHER.—This is a circular wire frame, about twelve feet in diameter, covered with muslin; a hole in the center admits a man from whose shoulders it is suspended by straps. An opening from one side admits the tree stem.



ASPIDISTRA LURIDA.

This plant, which we have frequently mentioned for its adaptability to room culture, is thus noticed by a writer in *The Garden*. "It is the only plant I know which thoroughly adapts itself to domestic life, living always with you, the leaves seldom dying, and with the most ordinary care always showing form and color of the most beautiful kind. The original plant, after three plants have been taken



from it by division, has now thirty leaves, the longest about twenty-seven inches, and five inches in the widest part, the whole forming a mass of vegetation which cannot be excelled, considering the conditions to which it is subject, and these conditions it enjoys thoroughly. The glare of the sun it does not like; a shady window and plenty of water it enjoys, and it will bear an occasional open window, which Ferns in a room will not. At certain times the plants are just taken on the terrace, and syringed, to take off the dust, which, with every care, will accumulate on the leaves."

SNOWBALL IN THE GREENHOUSE.

The Guelder Rose, *Viburnum opulus*, forced into flower at this season (April) "forms a beautiful object in the greenhouse. Dwarf, bushy plants of it are admirable for intermixing with other plants on stages, and it is an uncommon and beautiful object grown as tall standards, such as we saw the other day in the Conservatory at the Royal Exotic Nursery, Chelsea, where some care is taken to get these into a flowering state early in spring. These standards range from three feet to five feet high, and their wide-spreading, bushy heads are completely covered with snow-white balls of blossom. For forcing they are taken up from the open ground in autumn, potted in loamy soil, and kept protected from frosts till March, when they are gradually moved to a warm house, where in a very short time they develop foliage and flowers."—*The Garden*.

TURNIP-ROOTED CELERY.

Celeriac, or Turnip-rooted Celery, is yet but little raised in this country, except by the German population. It is used in flavoring soups, and for salad. When it is more widely known how exquisite a salad it will make, it will be more commonly cultivated. The plants should be raised at first in the manner of the common Celery, and transplanted out in June; they can be set in rows three feet apart and two feet apart in the rows, as they require considerable room. Cultivate well during the summer, and, according to a correspondent of the *Journal of Horticulture*, "when the root is the size of an Apple remove the earth and side shoots and cover up again. In October lift, clearing off the roots and outer leaves, retaining only the center leaves.

Bury the ball trimmed of roots in sand in a cellar or deep trenches to keep from all frost until required for use. For use well wash the balls, put unpeeled in a large pan of cold water and boil for two hours. Allow them to get cold with the peel on, to preserve their whiteness. Peeled, finely sliced, mixed with pepper, salt, three spoonfuls of olive oil to one and a half of vinegar, makes 'a dainty dish to set before a king,' or an epicure."

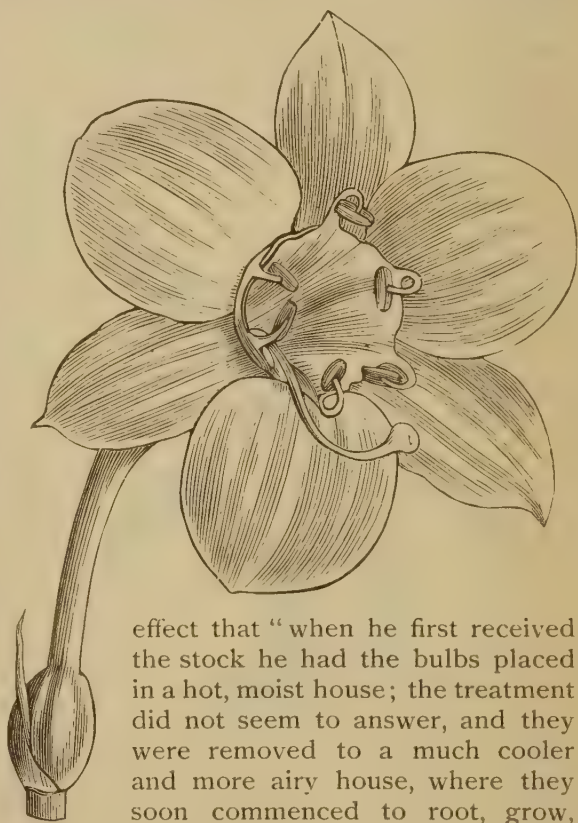
BEGONIAS FOR BEDDING.

Allow me to warn those who would wish to succeed with tuberous Begonia in the open air against starting them in heat or relying upon young plants raised in spring from seed. These latter will bloom fairly well, but not with sufficient freedom to render them really effective, neither will they come into flower until quite late in the season. Young plants should be set out in good soil in June, so that they may make good growth, and the following year they will be in prime condition for bedding. Started in heat, they require much care in hardening off, and I do not think they are ever so robust or grow away with such freedom as when allowed to start naturally. It is also a bad plan to pot the tubers, as more labor and worse results are thereby incurred. Most cultivators consider the potting of plants which have eventually to be planted out to be an evil, and there is no doubt about its being so in the case of Begonias, as, rooting naturally when strong very freely, they are apt to form coils of roots, and the soil becomes matted with fibres before they can be turned out of their pots. A far better plan is to set the tubers out at once in good, free, rather light soil in a cold-frame in a sunny position, far enough apart that they may have room enough to develop until the time comes for their removal to the open air. A frame is far better than a cool greenhouse, as the lights can be pushed off on fine days and left off on fine nights. Growth thus made will not be so rapid as when the plants are kept closer, but it will be of greater substance and in every way better fitted to withstand the variable weather we so often experience during the early summer months. Lifted carefully and placed in position promptly, there will be no flag-

ging and scarcely any check; watered in well, should the weather prove dry, the roots will lay hold of the ground in the course of forty-eight hours. One word in conclusion by way of caution: do not use raw manure for Begonias; they do not like it; rather mix a few handfuls of some fertilizer with the soil, some powerful, yet safe stimulant.—J. C. B., in *The Garden*.

EUCHARIS SANDERI.

The new Eucharis, E. Sanderi, lately introduced into England, is found to thrive with less heat than E. Amazonica. This is the experience of the manager of the horticultural company that is cultivating it most largely. His statement is given in the *Gardeners' Chronicle* to the



effect that "when he first received the stock he had the bulbs placed in a hot, moist house; the treatment did not seem to answer, and they were removed to a much cooler and more airy house, where they soon commenced to root, grow, and flower freely." The writer further adds, "I have seen the stock at Swanley to-day, March 27th, and am much pleased with the thriving appearance of the plants in a temperature of 60° to 70° Fahr. Many have produced their stout spikes of large, snow-white flowers, and are again sending up spikes. The manner in which the flowers hold up their heads, and the delicate fragrance they emit, contribute greatly to their charms."



PLANTING FLOWERS.

So quietly she passed that way,
Through lanes in memory's garden sweet,
The bird that sings its roundelay,
Heard not the soft steps of her feet;
The flowers will rise some future day.

Under the little sodded mound
She left the young plant of her love,
Where Roses, springing from the ground,
Send incense to the heavens above,
Sweet as the hope her heart has found.

The Lilies are a fragrant light,
Bright tapers burning in the sod,
Shining like stars in sorrow's night,
Lit by the loving hand of God,
To lead our thoughts and steps aright.

Fair blossoms grow upon the slope,
The dew upon them glows like tears;
White drops upon the Heliotrope,
A rosary of light appear,
Reflecting the sweet heaven of hope.

How blessed is the boon of flowers!
How sweet the hymn of singing birds!
How sacred the still home of ours!
How rich the hope that mocks at words!
How soft the light in golden showers!

No lofty tower, no monument,
No mountain ranges lifted high,
Stand half so near the firmament
As the green spot where loved ones lie,
At rest beneath the round blue tent.

—GEO. W. BUNGAY.

A FEW QUESTIONS.

1. Does moderate blooming prevent the vigorous growth of Mrs. Pollock, Happy Thought, or other variegated-leaved Geraniums? I have had a Mrs. Pollock four years; it has never been set in the ground, only occasionally repotted. It has never bloomed excessively, but it does not grow, and is not now, April, as large as some year-old common Zonale Geraniums that I have. I have never had a silver-edged Geranium grow well, either.

2. Can you tell me why my Fuchsia drops its buds? It is an extremely healthy and vigorous plant. I do not know its name, but it is a strong grower, a winter bloomer, generally. It has been kept all winter in a room without fire, except on the coldest days. The room has the south and west sun, and being between two other rooms where fires are kept has been used as a dining room, without fire, except on the coldest days; it never freezes in the room at night

even. The plant has grown as vigorously and now looks as healthy as could be desired, yet, with one single exception, the buds have dropped off. I think it has had enough and not too much water.

3. How can I manage to succeed better in raising Canary Bird Flower and Cypress Vine from seed? have never, I think, succeeded in raising more than two good plants from a paper of seed, it is true, they were very good plants. Last year, I did not get a single plant of Canary Bird. I planted them in pots in the house; Cypress Vine the same. I should like very much to get some good plants, they are so pretty. I also have much difficulty in raising plants from small seeds, like Lobelia, Ice Plant, Ageratum, &c. The seeds are so small they must be sown thickly, and they generally come up all in a bunch, and I find it impossible to thin them out without injuring the roots of those I wish to leave undisturbed. I will here mention my experience in raising *Cobæa scandens* from seed. I do it with diffidence, because it is different from your directions, but it is the truth that I have never raised a seed when I kept it dry, and the only success I have ever attained was when I kept it as moist as I would anything else.

4. I wish to have a few Tea Roses in my garden, this summer. Will the following do well in the open ground where they will only have the morning sun? Bella, Bon Silene, Saffrano, Souvenir de la Malmaison, Perle des Jardins, Marie Guillot, M'le Rachel. I have selected these from the catalogues by the descriptions without any personal knowledge of the varieties.

5. Will it do any harm to over-pot, as florists say, an English Ivy? I have one now doing well in a small pot, and should like, when I repot it, to put it in a pot that will be large enough for it to stay in quite a long time.

I have already trespassed, I fear, upon your patience, yet wish to add one word to express the regret I felt, in common with so many others, at the death of your lamented father. It had been a cherished wish of mine, now never to be gratified on earth, to meet Mr. Vick personally.—M. A. S.

1. The varieties of Geraniums mentioned above are both delicate growers, and it is well not to tax their strength by allowing them to bloom at all. They are only adapted to pot culture, and need good care.

2. The Fuchsia dropped its buds for lack of sufficient heat.

3. Fine seed must have care to germinate it well, keeping it in a favorable temperature, and not allowing it ever to

become dry. The difficulty of distributing fine seed evenly and thinly may be overcome by first mixing it with dry sand, three or four times its own volume, and then sowing the whole together as lightly as may be desired. When the plants are up and have made a little growth, there will be no trouble to remove them separately for transplanting, without injury. The seed of *Tropæolum peregrinum*, Canary Bird Flower, should, if possible, be sown in the propagating house or a hot-bed, where it can have bottom heat, it will thus germinate much more freely, and the young plants can be brought on more rapidly.

4. The varieties of Roses named will probably prove satisfactory.

5. It will do no harm to give the Ivy a large pot. It is not particular in that respect.

INSECTS AND INSECTS.

I have much trouble with my Ivy; those scale bugs are on it all the time. I take it down and use a little kerosene in the water and wash it, get them all off, put it back in place, and in two weeks time they are on it again. Sometimes I am tempted to throw it away. I have read a good deal in your MAGAZINE about the scale bug, but I have often wished that you would tell us how it gets on to Ivies and Oleanders. Is it by a little black fly? I have a good many of them, and when I go to water my plants they fly up and out of the pots; they seem to be down in the dirt. I kill all I can find, but still they come. Is there any remedy for the scale bugs or the black flies? I don't know what you think about the little black fly, but I do think it does hurt. I want you to tell me what is the matter with our Currant bushes. Just before the Currants begin to get ripe the leaves begin to curl up, and on the under side of the leaf are found thousands of green lice, and the leaves turn yellow and fall off, and then the Currants begin to dry up on the bushes before they are all ripe. Last summer we had hard work to get enough for a little jelly, and that was the third year that we lost them in that way. We have bushes enough for a good many bushels, and they have been taken good care of, but still we can't have any Currants to ripen. I shall be pleased if you answer these questions. I have taken the MAGAZINE ever since it was printed and I can't very well get along without it, one thing so good about it is that it grows better all the time.—O. S. P., *Princeton, Ill.*

The trouble here complained of with the scale insect arises from the fact that the plant is not perfectly cleaned. Even if all the insects should be destroyed it would be extremely easy for some of the minute eggs on the leaves or branches to escape notice; it is not to be expected that a plant can be entirely rid of them at once. A single insect left on, or a few eggs, would in a short time produce nu-

merous others, especially in a dry, warm room. An Ivy kept in the house should be so trained that it can be easily moved, and at least once a week it should have a shower bath of clear water. One of the most convenient ways of training an Ivy so that it may be moved is upon a trellis of a size proportionate to the pot or tub containing the plant; and one of the most inconvenient is upon strings wound about nails in the walls and ceilings. Plants on the walls and ceilings are also in a warmer and dryer air than those standing low down on a broad and low trellis. The insects find every thing suited to them on the plants in the upper part of the room where it is constantly dry and warm, and, consequently breed rapidly, and then they are not often disturbed. The scale insect is not derived from the black fly mentioned; it is a species of aphis, of which there are a great number.

The insect infesting the Currant leaves is, doubtless, also an aphis of another species. The use of a kerosene emulsion will prove destructive to both of them. The following preparation is one given by Prof. RILEY: Four pounds of rosin soap, common bar or yellow soap, is dissolved in one gallon of water, one gallon of kerosene is gradually added with constant agitation. This mixture can be kept on hand, and when some of it is wanted it can be diluted with ten times as much water. It should be thrown on the plants with a hand syringe; when applied to trees a force pump is best. In a day or two after using it, go over the plants again and wash with clear water. Care must be used always to throw the liquid on the under sides of the leaves.

CURCULIO.

Can you inform me of any way to keep the Curculio from Plum trees? Will carbon oil do it? Any information you can give upon the subject will greatly oblige—C. D. W., *Beloit, Wis.*

The only efficient method of preserving Plums from the Curculio yet known is to jar the insects from the trees and destroy them. In the early morning the Curculio insect is somewhat sluggish, and does not become lively until the sun has warmed the atmosphere; at that time it can be shaken from the trees where it remains at night, and can be destroyed.

A sharp rap on the tree is found to be best, bringing down the insects most surely. One having a number of Plum trees makes preparation to meet the Curculio by making a cotton sheet of large size, large enough to receive from the trees all insects that may fall. The sheet should have a slit in it, half way through; it is laid on the ground and drawn around the tree up to the end of the slit, thus covering all the surface underneath the tree. A small low limb is cut off within about an inch of the stem, and serves to receive the bearing of one end of a good stout pole placed against it. Then, standing at the end of the pole remote from the tree, a strong sharp blow is struck on it; this saves all pounding directly on the tree. A few blows will bring down all the insects on it at that time, and they can then be quickly destroyed. It is necessary to commence this operation about as soon as the blossoms fall, as the insects then begin their work, and continue it until the stone hardens, a period of about two weeks, after which it is no longer necessary. By careful attention to jarring during the time mentioned, performing it every morning, except on wet days, large crops of Plums can be saved which would otherwise certainly be lost.

SPOTTED CALLAS.

Will you please inform me of the best way of planting the bulbs of Spotted Callas? Should the young bulbs that form around the old one be taken off and planted in separate pots, and what kind of soil is best to produce the finest flowers?—MOLLIE, *Wytheville, Va.*

A light, rich soil is proper for the Spotted Calla, and it can be placed in a pot of medium to large size, as a growth of leaves is what is most sought. It will also do well planted out in the garden if freely supplied with water during dry times. In the fall the bulbs, or more properly rhizomes, can be lifted and dried off and kept through the winter in sand, in a dry place, secure from frost. The little offsets can be removed if preferred at the time of planting, and be grown on to full size.

OREGON VINEYARD.—Oswego, Oregon, has a vineyard of 15,000 vines. The vine is reported to be doing well there, and producing abundantly.

RANUNCULUS.

I want to cultivate some of the Ranunculus, and I understand it will not flourish in the hot sun. I have a flower bed on the north side of the house which receives but little sunshine. Would this place be suitable for the Ranunculus? Can the roots be left in the ground all winter, or should they be taken up like Dahlias? What is the proper time to plant them?—M. S., *Centreville, Ind.*

The situation named would be suitable for the Asiatic Ranunculus. The roots can be planted in the fall, about two



ASIATIC RANUNCULUS.

or three inches deep; they will then need a covering of straw or leaves sufficient to prevent the ground freezing about them, or they will be injured. If the winter is uniform in temperature they will come

through well and be ready to start to grow early in spring. The danger then is our frequent spring frosts. If the winter should be quite variable, as often is the case, the plants are apt to start early, when they are more liable to be injured. On the whole, the best success is reached by keeping the roots stored away in a warm, dry place during winter, and planting them early in spring. It requires considerable care and skill to raise this beautiful plant in this country.

MILDEWED ROSES.

My Rose bushes are affected with a complaint which causes most of their leaves to drop, rendering them rather unsightly objects when they should be most beautiful, as in this latitude the autumn bloom is the choicest. The growth and bloom do not seem to suffer so much, it is the gaunt, disfigured look of the plants. I enclose some leaves which I hope will reach you in a condition to enable you to make a satisfactory examination. The diseased leaves are blotched with brown spots, and all but the younger leaves seem to suffer. Is it mildew, blight, or what, and is there a remedy? We have the complaint in a more or less aggravated form every year, this year worse than usual. I do not think there is any trouble with the drainage of my Rose plat, water never remains on the surface.—SUBSCRIBER, *Baltimore, Md.*

The above letter, received last autumn, is a specimen of many similar ones that constantly reach us. The appearance of the leaves described is unquestionably a result of mildew. Mildew prevails, or occurs, in some localities much more than in others; it is apt to visit Rose

plants in autumn when the temperature begins to fall, especially when the night temperature drops low; it is not fatal to the plants at that time, since the wood is then ripe, but it sadly disfigures them and diminishes the bloom. It is apt to prevail at all seasons where the soil is not properly drained, and some varieties of Roses are more subject to it than others; the most vigorous growers are least apt to be affected with it. There is no absolute preventive of it, but the precautionary efforts consist in good drainage, high manuring, and the selection of the most vigorous varieties, and pruning in a manner that prevents exhaustion of the plants in bloom, and lastly, the application of flowers of sulphur to the foliage, dusting on the dry powder as soon as the affection appears.

DROOPING FUCHSIA.

Can you tell me the name of the vine of which specimen is enclosed. Please answer through the MAGAZINE, which we have taken the past four years. —MRS. C., *Providence, R. I.*



The plant is *Fuchsia procumbens*; it is quite pretty and peculiar, and is a good basket and vase plant. The illustration herewith shows its habit of growth, also a spray of leaves and flower of natural size.

RENEWING A STEM.

I have a *Solanum Jasminoides* that has no leaves until some put up from the bottom of the vine. What treatment shall I give it? Will it do to cut it back below the leaves?—T. A. McC., *Stanley, N. Y.*

If in a dormant state the vine could be cut back, to induce a new growth furnished with leaves; but, as this is not the case, the safe way to proceed is to bend down all the stems so that the place where new growth is desired to start shall be the highest point. The top of the vine should be held down permanently until, and after, a new shoot starts. A little cross cut in the bark, to check the flow of sap, will hasten the pushing of a new shoot. In the fall the plant can be allowed to dry off, and then, when in a half dormant state, the old stem above the new growth can be cut away. Another way will be to bend down the stem as before, and, if possible, coil it around in a small space and fasten it down; a number of young shoots will then start from the old stem, which can be retained in that form. Something will depend upon the shape of the old plant, but the above directions will hold true in principle, while the exact method of handling can correspond to the peculiar requirements of the plant.

CACTUS TO BLOOM.

I wish you would tell me what treatment to give a Cactus that it may bloom. I do not know its name. It is three-cornered, and has a large red flower.—MRS. W. V. T., *Rives Junction, Mich.*

A species in common cultivation corresponding to the above description is *Cereus triangularis*. Possibly it may be the one mentioned. By keeping the plants quite dry during the winter season and starting them into growth in spring, watering freely at that time and during summer, and keeping them in light soil their wants appear to be met, and by this treatment they seldom fail to flourish.

DATURA IN FLORIDA.

A friend sends us an account of a *Datura* growing at Ford's Grove, on lake Eola, in Florida. It is five years old, and measures thirty-nine inches in circumference at the ground, and has at least one thousand buds on its branches. When the flowers are fully open they are from twelve to fourteen inches in length and four to six inches across the orifice. The species or variety not named.

BARBARA'S FLOWERS.

My garden must languish, untended,
 I sing of another, to-day,
 Where rare floral beauties are blended,
 'Tis Barbara's, over the way.
 What, over the way? was I dreaming,
 Alas, that the way is so wide,
 That highways athwart it are gleaming,
 So many, our homes to divide.

But spirit than flesh should be stronger,
 As mind rises matter above,
 And, though she is near me no longer,
 I'll call her "my neighbor in love."
 My friend is no fanciful maiden,
 A true German matron is she,
 Whose shoulders with burdens are laden,
 Whose thrift is a wonder to see.

No gossiping neighbor derided
 When Barb'ra had produce to sell;
 The ways of her household she guided,
 And looked to her garden, as well.
 So, when the best damask enfolded
 Her table on festival days,
 Her firm, yellow butter was molded
 To forms that a sculptor would praise.

And fancy her picture is showing
 A dress without wrinkle or speck,
 A crimson Geranium glowing
 Against the soft white at the neck.
 How oft were my weary tasks lightened
 By thoughts of our Father's kind care,
 Beholding the Lilies that brightened
 Her borders, and braids of her hair.

The words of the sage are far-reaching,
 And millions are guided and led;
 So Barbara followed the teaching
 Of Froebel, the wise, when he said,
 Come, let us consider the duty
 To live for our children each hour,
 To train to symmetrical beauty
 And nourish each bud into flower."

No plant in her window was able
 By beauty of growth to out-vie
 The "Olive-plants," circling her table,
 That cheery south window close by.
 O, children, wherever I'm roaming,
 I cannot forget you, I know,
 Who tripped past my cot in the gloaming,
 Blithe Callie, and Aggie, and Jo,

The lowing of cows, and the clatter,
 As homeward you followed along,
 With antics and quaint German chatter,
 Commingled with snatches of song.
 In autumn, perchance, you would linger,
 'Till trees of their leaves were all shorn;
 The mother had taught each deft finger
 To weave them your home to adorn.

Thus sing I the praise of the woman,
 Whose tact, like a magical loom,
 Could fashion from fibers so common,
 Such wonders of beauty and bloom.
 In soil that no winter can harden,
 With treasures of life's frigid hours,
 Still brightly in memory's garden,
 Are blossoming Barbara's flowers.

—MRS. L. V. A., Fontanelle, Iowa.

A BEGINNER'S QUESTIONS.

Does *Camellia Japonica* come as mixed seed, and when and how shall I plant it, and in what kind of soil? *Azalea Pontica*, Ghent variety, please give what information is necessary about it, and, also, *Coleus* seed, *Indian Shot*, *Canna Indica*, *Castor Bean*, *Centaurea gymnocarpa*. I planted *Gladiolus* bulbs in a box, last February, and they are now two feet high? are they too large to transplant to the lawn? Will they bloom if kept in doors? Some of them have three stalks or blades. Have also some *Gladiolus* seed; where and how shall I sow them, and in what kind of soil? The seed was gratis, it came packed around the bulbs, they are very dry looking and do not look as if they would germinate. Some bulbs of *Tuberose* and *Amaryllis Treatiae* I planted in boxes of rich earth at same time as the *Gladiolus*; they have not come up yet. Is it too early to transplant them on the lawn, and do they need much water? I planted some small plants of *Roses* three weeks ago, it was very hot when I planted them, but it commenced raining in a few days and has rained every three or four days since. I had an arbor put over them; they are shedding their leaves, what remain on are curled and black and are full of little green bugs or slugs. I pick them off every morning, but they continue to come. I have seen tobacco tea recommended; how strong shall I make it, and how use it? Is it too late to sow lawn Grass? Will it grow in shade? Part of our yard is shaded with Oaks and other forest trees. What kind of soil suits Lilies and Hyacinths? I have a few white Lilies and some purple Hyacinths given me by a friend. Those planted in sunny exposed places look yellow and do not grow, and others in shaded, rich places are very flourishing. Can I transplant Ice-plant and Dew-plant, the seed sown came up so thick that they will not grow.—MRS. D. W. F., *Flowe's Store, N. C.*

Camellias and Azaleas are raised from seed only by those who make a business of raising stocks or originating new varieties. Amateurs should procure plants of the best varieties. *Coleus* seed should be sown in fine soil in a warm place; a propagating pit or a hot-bed is most suitable. Cover the pot in which they are sown with a glass, and supply moisture by means of a saucer underneath the pot, keeping it filled so that it will be taken up by the soil in the pot. *Indian Shot* needs to be planted in a warm place, and either to be soaked previously to soften the shell, or, what is better, to have a hole made through it with a sharp knife or by filing. By so doing the moisture is able to reach the seed and it commences to germinate almost immediately. *Castor Beans* can be planted like Corn in warm, dry soil, as early in spring as it will do to plant Corn. The instructions given on page 135 of this volume for *Dusty Miller* will apply equally well to *Centaurea gymnocarpa*.

The best way to manage with the *Gladiolus* plants mentioned is to take the side

off the box they are in and push out all of the soil, without disturbing the plants, in a good spot in the border or garden. The *Gladiolus* seed inquired about and described as "very dry looking," will, we think, be found to be Buckwheat chaff, and not seed at all. The *Tuberose* and *Amaryllyis* we would turn out into the border in the same way as recommended for the *Gladiolus*, and not on the lawn. Give them water freely while growing. The slugs on the *Roses* can be destroyed by syringing the plants with soap suds made with whale oil soap, one pound of soap to eight gallons of water. It is best to throw it on the plants with a syringe, so that it will strike the under as well as the upper side of the leaves.

The shady place mentioned for the *Lily* and *Hyacinth* is probably best for them in your locality. There is no difficulty in taking up and transplanting the *Ice-plant* and *Dew-plant*, or, in fact, most of the annuals; water the soil if it is dry, and do the work towards evening, and shade the young plants a few days after moving, if the sun should be strong on them.

ILL-FORMED PLANTS.

I have an *Achania Malvaviscus* which has bloomed all winter and has buds now, it has but one stem, no branches, and is forty inches tall; what shall I do with it this summer? Shall I plunge it in the garden? Ought it to be cut back? If so, how much! How large a pot should I use for it? I would like to cause it to grow bushy, but don't know how. My *Geraniums* have bloomed but very little this winter, though they look healthy and green, and don't seem to bud now. I have had one a year that has never shown a bud, and has but two branches, it is in a five inch pot and is two feet tall. I have tried to make it bush out by pinching, but to no purpose; now I am letting it have its own way. What shall I do to make them bloom? My *Fuchsias* make buds, but they blight; what is the cause? I have also a *Crassula lactea*, two years old, looking green and healthy, but it has never bloomed; is it old enough, or not? Should it have much or little water? My plants, with the exception of the *Crassula*, which has an eight-inch pot, and the *Achania*, which has a seven-inch pot, have five-inch pots. They have been kept in a room with a south and east exposure, warmed by a wood fire and a dish of water kept on the stove. Would the dirt from an old hot-bed, which had sheep's manure for bottom heat, answer to pot plants? The manure has been thoroughly mixed in.—SUBSCRIBER, *Strafford, N. H.*

These tall plants should be made to branch low down. The best thing to do is to plant them out for the summer in the garden in a good open spot in mellow soil. Instead of cutting off the tops, they

can be dealt with more gently, giving them less check, by breaking the stems and bending them down, but letting them hang by the bark on one side. Break them about six inches from the soil; the result will be that the buds below the fracture will commence to grow and will start branches, when the tops can be cut entirely away. The gardener has it in his power to shape these plants as he will. The *Fuchsias* have probably lacked heat. The *Crassula* has been in too large a pot and probably with soil too rich. It needs a light, poor soil and a small pot, and to be watered lightly. The soil from the old hot-bed will be good for potting, but can be improved by addition of some leaf-mold and some sand.

LILIUM AURATUM—GLOXINIA.

I want to learn how to take care of *Lilium auratum*. And how must I care for my *Gloxinia*?—S. H., *Bloomington, Ind.*

See page 2 of this volume for *Gloxinias*. *L. auratum* is a subject somewhat troublesome in this country. The best advice in regard to it that can be given is to plant the bulb in a good mellow soil, pretty deep, at least six inches, and to give it good garden treatment. If a choice of location can be made we should prefer to place it in a bed of shrubbery, where it will have partial shade. The north side of a hill is probably one of the best sites. It appears to suffer from sun heat.

DIVIDING TUBEROUS BEGONIA.

Please tell me if the tuberous *Begonia* can be divided, and in what way.—B. S., *Hillsdale, Mich.*

A *Begonia* tuber, when it begins to sprout, can be divided into two or three parts, each with a sprout, and will make good blooming plants. It is not customary in the trade, however, to propagate in this manner; the natural species are raised from seed, and the hybrids from leaf-cuttings.

FLOWER REVERSION.

A spike of *Hyacinth* bloom from a friend in Portsmouth, Va., has its flowers merely tipped with color, each petal is green with a purple point, a very striking example of partial reversion of flowers to leaves. It has bloomed in this manner for two years.

THE EGLANTINE.

The question is frequently asked, what is the Eglantine? The name is not one in common use in our time, and its significance can be best understood by reference to early writers. Its use is now confined mostly to poetry. WEBSTER quotes what NARES has to say about it, as follows: "MILTON has distinguished the Sweet-brier and the Eglantine,

Through the Sweet-brier, or the Vine,
Or the twisted Eglantine.

—*L'Allegro.*

Eglantine has sometimes been taken for the Honeysuckle, and it seems more than probable that MILTON so understood it, by his calling it 'twisted.' If not, he must have meant the Wild Rose." The reason for this last supposition is not



ROSA RUBIGINOSA—THE WILD SWEET-BRIER.

stated, but some early writers have used the word in this sense, and it is now used in this way by the French. ALPHONSE KARR, in his "Voyage Around My Garden," in describing a sucker that has started up from the roots of a budded Rose tree, says, "Wait a year and it will become an Eglantine bush. Bruise its leaves, it exhales a Pineapple odor peculiar to one species of Eglantine." Here the name is used as a common term for the Wild Rose, but evidently the "one species" is the Sweet-brier, and it is with reference to this particular plant that English writers have most used the word, Eglantine.

The Sweet-brier is, botanically, *Rosa rubiginosa*. It is a native of Great Britain and Europe, and in France is much employed as a stock plant for budding florists' varieties of Roses. It is a plant that usually grows about six feet high,

but is inclined to climb, and with a little encouragement can be trained quite a height. The stem is armed with strong and hooked prickles, and also some slender and awl-shaped ones. The leaflets are doubly serrate, and the under side is downy and beset with russet glands that, especially when bruised, exhale a pleasant fragrance. The flowers are small, pinkish, and mostly solitary, with a pear-shaped hip.

That its thorns are large and strong enough to be a protection to it there is sufficient mention. HERRICK says,

From this bleeding hand of mine,
Take this sprig of Eglantine,
Which, though sweet unto your smell,
Yet the fretful Briar will tell,
He who plucks the sweets shall prove
Many thorns to be in love.

So SPENSER says,

Through which the fragrant Eglantine did spread
His prickling arms, entrayl'd with Roses red,
Which daintie odours round about them threw.

The same author, in the following lines, contrasts the prickles with the fragrance of the leaves:

Sweet is the Rose, but grows upon a brere ;
Sweet is the Juniper, but sharp his bough ;
Sweet is the Eglantine, but pricketh near ;
Sweet is the Firbloom, but his branches rough ;
Sweet is the Cyprus, but his rind is tough ;
Sweet is the Nut, but bitter is his pill ;
Sweet is the Broom flower, but yet sour enough ;
And sweet is Moly, but his root is ill ;

So every sweet with sour is tempered still,
That maketh it be coveted the more ;
For easy things that may be got at will,
Most sort of men do set but little store.
Why then should I account of little pain,
That endless pleasure shall unto me gain ?

The fragrance of the Sweet-brier is the quality that endears it. We can scent the odors as we read the following lines from *Midsummer Nights' Dream* :

I know a bank where the wild Thyme blows,
Where Oxlips and the nodding Violet grows ;
Quite over-canopied with lush Woodbine,
With sweet Musk-Roses, and with Eglantine.

But SHAKESPEARE surpasses even this allusion to its fragrance in the simile, or shall we say hyperbole, contained in the following lines from *Cymbeline* :

Thou shalt not lack
The flower that's like thy face, pale Primrose ; nor
The azured Harebell, like thy veins ; no, nor
The leaf of Eglantine, whom not to slander,
Out-sweetened not thy breath.

In the following lines of SHENSTONE we feel ourselves transported at once into the midst of the loveliest country scenes in spring time :

Come, gentle air ! and while the thickets bloom,
Convey the Jasmine's breath divine ;
Convey the Woodbine's rich perfume,
Nor spare the sweet-leaved Eglantine.

KEATS refers to the "Dew-sweet Eglantine," and COWPER says,

Grateful Eglantine regales the smell.

SCOTT, describing the scene in "the Trosach's wildest nook," where James Fitz-James lost his steed, gives us the following lines, and, perhaps, for their beauty, our readers may pardon us for quoting at more length than is really relevant.

Boon nature scattered, free and wild,
Each plant or flower, the mountain's child ;
Here, Eglantine embalmed the air,
Hawthorn and Hazel mingled there ;
The Primrose pale, and Violet flower,
Found in each cliff a narrow bower.
Fox-glove and Nightshade, side by side,
Emblems of punishment and pride,
Grouped their dark hues with every stain
The weather-beaten crags retain ;
With boughs that quaked at every breath,
Gray Birch and Aspen wept beneath ;
Aloft, the Ash and warrior Oak
Cast anchor in the rifted rock ;
And, higher yet, the Pine-tree hung
His shattered trunk, and frequent flung,
Where seemed the cliffs to meet on high,
His boughs athwart the narrowed sky.

In the same poem are the lines,

The Wild Rose, Eglantine and Broom,
Wafted around their rich perfume.

The same writer not unfrequently mentions this plant.

Leaving the poets, we may say that the Sweet-brier has been cultivated in this country from an early time in its settlement, and in many places the plants are to be found growing wild, having spread by seeding. It is found in many of the best gardens, and will always be prized for itself and its associations.

SMELLAGE AND BITTERS.

In the April number of your MAGAZINE I find allusion made to a plant called Smellage, and further specified as *Ligusticum Levisticum*. I am glad to hear from this once familiar plant, and take the liberty to throw a little light upon its merits, which you seem not to have, as you conclude your remarks with the statement that "there is no use made of it." At my father's, in the Mohawk valley, this plant was considered valuable in some way for milch cows. I do not know the nature of its qualities, but I do know that among a large number of cows, usually averaging about ten, sickness of any kind was almost unknown, and, also, that the milk and butter were remarkable for their sweetness. Smellage was cut fine and added to the salt given them once a week, as long as it was green, and the cattle became wild to reach it as soon as they began to smell it. It was also used in the family; the seeds being placed in a

bottle of whiskey, and so kept the year round, and considered a specific for dysmenorrhea. I should be very glad to know where I could procure either the seed or the roots now.—A MARYLANDER.

The plant has quite fallen into disuse, having no properties of any particular value; dairymen do not now employ it. We have found out that nature does not require "bitters" as often as was once supposed. Tinctures of roots and herbs will be left farther and farther behind as intelligence advances. How much suffering and how much expense would be spared if our whole people could comprehend that the great physiological fact of the age is that nature cures. With fresh air night and day, suitable exercise, proper diet, and a well regulated life, we may leave the rest to Him who disposes events, and calmly and confidently abide the issue. The whole sum, millions of dollars, expended yearly in this country for patent medicines is a total waste, and even far more. Next to intemperance, the use of patent drug mixtures is the one custom in our country that results in the greatest destruction of property, as well as much personal injury.

NOTES AND QUERIES.

The Chicago Market Potato, of which I had half a pound, yielded twenty-two pounds, without a fair chance either, and some of the tubers were even finer samples than the GUIDE shows. They are earlier and nicer eating than the Early Rose. The Russian Oats promised to be a success until the high winds lodged them and prevented seeds filling. The Pansies were the finest I ever saw, all coming nicely. But the Verbenas as soon as sprouted were all destroyed by a worm which I couldn't exterminate. Among my plants is a fine California Pepper Tree, about three feet high; its foliage is very beautiful. I do not know as it grows out doors in this latitude. Can you tell me? I have also a Calla Lily which has bloomed three times, being not quite a year old; is it not unusual?—F. H., *Victor, Iowa*.

The California Pepper Tree is not hardy in the northern and western States. The Calla mentioned is a vigorous one.

AMARYLLIS JOHNSONII.

My *Amaryllis Johnsonii*, which is about five or six years old, is now, May 1st, coming into full bloom; five blossoms on one stalk and four on another. A younger plant has three flowers on its stalk. I let them rest in summer, under the arbor, just keeping them from drying up entirely, and repot in the fall. I have been very successful so far in raising them.—R. S. A., *Philadelphia, Pa.*

NATIVE FERNS.

One of the oddest of all our Ferns is the Grass Fern, *Vittaria lineata*. It grows in Florida only on the trunks of the Cabbage Palmetto tree, and its long, narrow fronds always droop downwards. The root-stocks are clothed with fine scales. The width of the frond is seldom more



VITTARIA LINEATA.

than the twelfth part of an inch, but in length, when full grown, it is often as much as three feet.

According to Dr. EATON, "the principal veins are three and can be seen best by splitting a frond with a very thin and sharp knife. The mid-vein is completely buried in the parenchyma of the frond. The fertile veins are parallel with it, one on each side, very near the margin, each one nearly reached by a furrow on the under side of the frond. At distant intervals there is a very short oblique veinlet rising from the mid-vein and connecting it with one or the other of the fertile veins." The furrows near the margins, mentioned above, are shown in our engraving, and it is along in these that the sporangia are borne in a continuous line, and without any covering or indusium.

The name, *Vittaria*, is derived from the Latin *vitta*, a ribbon, in allusion to the long, narrow fronds. We have never heard of the cultivation of this Fern, and from the fact that it is epiphytic on the Palmetto, it is extremely doubtful that it will ever be brought under cultivation except in connection with its host; of course, in Palm houses, this might be

done, or in large collections of Ferns having houses specially for them. It is said to be found in Mexico, and in the West Indies, and in some parts of South America.

DOUBLE GLOXINIAS.

I am a MAGAZINE reader, and find it very useful, containing as it does, every month, something of importance and interest, both for beginners and for those having years of experience.

I noticed in the January number, page 16, of this volume, that a gardener in Hungary had produced a double Gloxinia from seed. I now have the pleasure to inform you that I have in a collection of Gloxinias five distinct varieties raised from seeds. I send you by this mail a box containing three flowers of the double sorts, one better than the others. The flowers are not equally good on the same plant, but generally they come pretty fair, and the plants grow as freely as those bearing single flowers; they are abundant in flowering, and I have one with blue flowers of the *crassifolia* tribe, with as many as thirty flowers in full bloom. The *erecta* sorts are good, too, but not so large and fine as the preceding. I have at this time young seedlings coming on which are the progeny of those of those of which I have sent you specimens, and no doubt many new varieties of double Gloxinias may be expected from them. I prize the Gloxinia above all other summer blooming plants for the conservatory; there is sometimes a trouble with them called rust, but if the plants are carefully guarded it will not appear. They like plenty of heat and moisture.—PIERRE VANLANDEGHEM, *W. Philadelphia, Pa.*

The specimens above referred to were duly received, and though not in a condition to display their beauty to advantage, nevertheless clearly showed their structure. Each division of the corolla has a petaloid form growing to it on the outside, starting from its base and reaching half or two-thirds of the way to its edge. The color of these supernumerary parts corresponds to the color of the corolla, and they are attached to it by a median line, being free at the edges and tip, and more or less recurved.

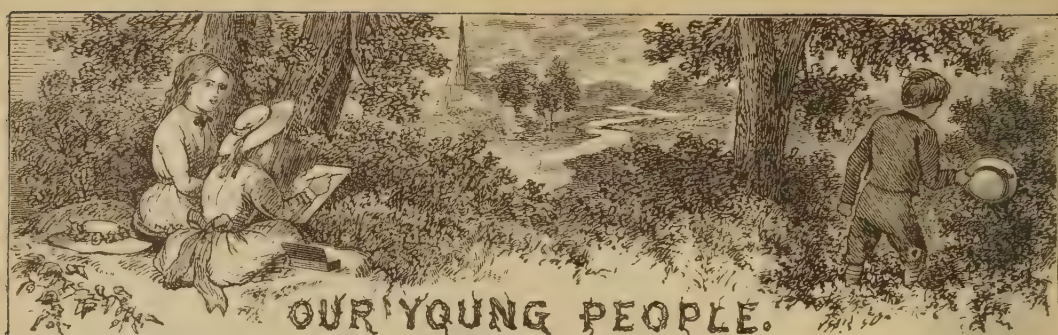
ON DIT.

That Pennyroyal distributed in places frequented by roaches will drive them away.

That wild mint will keep rats and mice out of your house, and, it is said, will also keep them from entering corn stacks.

That leaves of Parsley, eaten with a little vinegar will prevent the disagreeable consequences of tainted breath by Onions.

RASPBERRIES.—The young plants when only a few inches high can be safely removed and transplanted, if done with care in a moist time.



STEP BY STEP.

One of the evenings of Miss Bristol's class-reception Agnes Strong reminded her, while taking off her wraps, that now she was to tell them all about how they could discover curious and interesting things in natural productions, so as to enjoy the pleasure and surprise of finding them out for themselves before having read of the same in books.

Miss Bristol laughed as she answered, "Even if I could tell you 'all about' how to acquire such knowledge, would that really be finding out for yourselves? But did I truly promise what you have just stated? Think!"

"I remember," said Herbert Talbot, "that some one in the class, last Sunday, inquired where you were educated, and you replied that you were never educated at all, in the common understanding of the expression, but that you would sometime tell how, when quite young, you commenced, step by step, to learn for yourself some things that long afterward you found in books."

"Yes, that is what I intended to say, and will fulfill my promise this evening if you desire, though it will be talking a great deal about myself, and the details involved, though entirely true, are so simple that you will probably be disappointed."

"They cannot be disappointing," said Emma Stanley, the embryo poetess, "because your experiences were those of a child who grew into the woman whom we know now."

Miss Bristol responded with a smile and bow, and then resumed: "My memory goes back to very early childhood, as you may judge from the fact that I well remember of once earnestly begging my father to have the fiercely-swaying trees of his orchard cut down to stop the wind

blowing, which was then interfering with the day's out-door pleasure. He answered, 'Nonsense, child! it is the strong wind itself trying to blow the trees away.' 'But father,' I said, 'when I make my fan go it makes wind.' But he only laughed and said 'Wait a little,' and pinching my ear he was off to his business. The instant consciousness of being all in the wrong so mortified me that, being very sensitive, I volunteered no more of my ideas to wiser heads, but tried to puzzle out things for myself, and of course made little progress; but the habit became fixed.

Before I was eight years old my mother was prostrated by what proved to be a long illness. Three times during two years her friends gathered about her, expecting to see her die. During that time different physicians had recommended only good nursing as likely to prolong her life a little. I will add that to the vigilance and untiring watchfulness of my father was due, it was said, her ultimate improvement, so that, by the time I was grown, the saint-like woman could move about the household—her very presence among us often seeming like a benediction of gentleness and peace, as though she had become spiritualized through long lingering near the gates of Heaven. Pardon this seeming evasion of my promise, but—"

"O, please go on," exclaimed May Talbot, it is always charming to hear the experience of different persons."

"And to note," added Emma, "how continued suffering elevates and refines, when patiently borne."

"Its beautiful discipline," remarked Miss Bristol, "may be felt not only by the afflicted ones, but by those who have the care of them, as my father has often attested. But I only mention the conditions

surrounding my childhood as a reason for my education having been suspended at an early age, and because I trace to those conditions the fact of my having been thrown much upon my mental resources, thus fostering a tendency to pry into and learn some things for myself. For instance, I was told one day where to find some Liverwort, which was to be prepared as a fever drink for my mother, and that I was to gather it each morning with the dew on it. My course lay along the white, beaten path that led from the back yard, alongside the orchard, till reaching a fence, where a stile was crossed, the path stretched still beyond, down a long, green slope, and ended at a platform that took one directly into the upper story of my father's woolen mill. The long flight of weather-beaten steps that led down to its base I was never allowed to descend.

But I have followed the foot-path too far in my narration. The well-remembered picturesqueness of the whole enticed me. Before reaching the stile I was to leave the path and turn at right angles down another green slope until I reached the Chestnut tree at the foot. (O, the delightful memories that cluster around that grand old Chestnut tree!) Just beyond it stretched a long hedge of Hazel-nut bushes, small white Birches and wild Grapevines. I had never thought it possible to get over or through this hedge, but had now been told that just opposite the tree was an opening hidden by drooping vines, where the workmen passed through to fish for speckled trout; in the same stream it was that almost enclosed two sides of the square area of hill and dale that held our home, and whose waters were caught midway to turn the creaking old mill-wheel."

"O, what a lovely picture!" interrupted Emma; "excuse me, but I can imagine how the babbling stream sobered down to its work until it had made its rounds on the wheel, and then, crowned with a foamy crest, it danced on its way, rippling and sparkling more than ever, as though conscious it had been of some use."

Here her cousin, Tom Stanley, groaned and said, "Spare us, please;" but received a sharp rebuke from Herbert Talbot, who asked what life would be like without its poetical touches, and declared

that everybody knew that water in motion is poetry itself. Then Tom, remembering Herbert's admiration of Emma, said for his sake, "Beg pardon, Em.; am sorry I can't help being such a bear."

Then Miss Bristol, who could hardly repress an outburst of merriment, exclaimed, "Well, I am thankful if any one has enjoyed my digressions; but at last you may imagine me really seated on a large stone near the water, where high banks, trees and hedge excluded the sun all day long. There for the first time I saw and gathered the clinging leaves of the Liverwort; there for the first time I began to ponder over the different methods of vegetable growth. It was a great surprise to find rootlets growing from the under sides of the leaves; but as the leaves formed the entire plant it seemed a fortunate arrangement, and I wondered if hardly any one in all the world had noticed or thought about it. At any rate I should watch closely for odd and curious things after that, and my first collection of plants, procured after days and nights of labored thought and scheming, were really an Ice-plant, a Sun-dial, so called, and a Sensitive-plant. No treasure-trove of happy mortal ever yielded the delight that my new possessions yielded me! Each leaf was noted as soon as formed; but alas for the hapless criminal who unwittingly kills with kindness! My father had a liquid fertilizer which he applied to his Grapevines, noting which, I quietly poured some around my plants, and being too strong, it killed them. I was just ruined. I felt I should never get three such plants together again. But I was learning, step by step. Heart-broken, I strayed the next day into the edge of the Pine plains near by to gather some Wintergreens. When I returned my father handed me an open-meshed wicker basket in which was a gorgeous Humming bird, caught in my mother's room, telling me to look at it and let it go. I begged him to let me keep it just a day or two, and then I put some sweetened water in a small quill, stuck it in a sponge and placed it in the basket. But he didn't recognize the blossom. Then I gave him a medley of such flowers as I could find to brighten his prison, and among them were some yellow, coarse-looking Lilies. To my surprise the bird instantly thrust his bill

down a hidden channel in the center of each petal, and went the rounds over and over, as though the supply were exhaustless. The Humming bird's secret made me happy for days, and I have ever since felt great respect for a flower that bears proof of having been formed for a special mission, its chambers of sweets being so fashioned that no pilfering bee can enter. I am still inclined to think that this interesting feature of those coarse Lilies has not been generally known until recently.

"Whether from surfeit or home-sickness, I know not, but next morning my bird was dead. After a little grieving and some regrets, my usual curiosity got the better of me, and taking from my father's desk a magnifying glass, used on his fabrics for counting the number of threads to the square inch, I proceeded to examine the bird's tongue, and made another discovery for myself. The tongue was double, seeming to be composed of two coarse, very rough hairs, clinging slightly together, and it mattered not to me then who had made the discovery centuries before, perhaps.

About the same time a workman brought me a hair-snake floating in water, telling me that the horses switched them out of their tails while drinking in the stream! So I at once put two or three hairs to soak in a sly corner; but on a cleaning day the lost dish was found and contents thrown out before I had even examined to see if there were not a little wiggle in the tail of either one of them."

"Did you give it up then?" inquired Tom.

"Not at once; but fortune favored me again. One evening in the dusk, I stepped on something that partly crushed under my foot. I got a light, and saw a hair-snake wriggling itself in rings out of a fissure in the side of a field cricket. I called my father, and he marvelled over it to my heart's content. I knew nothing then of parasitic insects, and could learn nothing more of the origin of the wee serpent until, years after, I read in a newspaper a paragraphic statement that professor somebody, in Boston, had discovered that hair-snakes originate with crickets. Now, however, entomologists find them oftenest in beetles. I believe it is still left for some of you to dis-

cover what insect it is that stings the beetle with the eggs that produce the snake.

"In those days I discovered, too, for myself, that mosquitos originate with wigglers. Playing with some rain-water one day, a large wiggler was caught on my thumb nail, and, while I was examining its struggles, the same head began to move forward with its insect body attached, leaving only an empty sack behind it. It seemed feeble at first, and while it was shaking out its wings and unfolding its proboscis, I had shown it to each member of the household, even to the invalid, who was then sitting in her chair.

"Afterwards, when I came to train vines, I learned what botanists already knew, that most vines persistently twine one way, while a few others just as persistently twine the other way. Meantime I was always putting into boxes in the garret all large, curious-looking worms that I found, and feeding them daily from the same plant or bush upon which I had found them, until they would mature and retire from the world after their own fashion. And then how I watched for some new, forthcoming pattern of butterfly! But I must stop."

"Go on, go on!" said two or three voices.

"Well, then, just one more bit of childish experience. I had read in a story book of the German peasantry sometimes caging crickets, training them in various ways, and that they lived a long time. So I determined to have some for the sake of their nightly music. I soon had two captives, and felt they ought to be happy together. I fed them bits of soaked bread, sweet-cake and fruit; but never a chirp. One morning I found that the larger one had turned cannibal and eaten the other, except its head and legs. Long afterward, when I read of this propensity, I said to myself, 'I found that out long ago.' And now, positively, no more of my egotism to-night."

"If that be so," May Talbot rejoined, "then I shall show that I have at least learned for myself when it is time to go home; and it is time to go now."

So there was a general uprising, an expression of thanks, a bustle of donning wraps, an exchange of "good nights," and they were gone.—AUNT MARJORIE.



RUBY THROAT AND HIS HOME.

Of all the little feathered friends who visit us when the warm summer weather comes, none are more beautiful than the tiny, ruby-throated Humming Birds, noted far and wide for their extremely small size and brilliantly colored plumage. The male bird is more gaily colored than his little mate, and looks like some precious gem, as with every turn of his body the hues of his feathers change from sombre brown to gold, crimson and brilliant green. He is wonderfully small, and if it were not for his coat of beautiful feathers he would be scarcely larger than a good sized bee. The female bird wears a dress of more quiet hue, brown, grey,

white, and a tinge of green being the principal colors. The beaks of these birds are long, straight and pointed, encasing a tongue of curious construction, for it is formed like a tube, but separated at the end, and can be darted out to a considerable length, thus enabling them to extract from the hearts of flowers the honey contained in them, or the small insects which may be there secreted. They hover above the flower while extracting their food from it, keeping their wings in motion, thus producing the humming sound for which they are named. Their nests are made in the daintiest manner of cotton, or substances similar to it, then covered with scales of the grey lichen,

which they find on the rocks or trunks of trees, and when fastened, as they sometimes are, against the side of a tree, can scarcely be distinguished from it. The nest is somewhat oblong in shape, with an opening at the top. They seem too fragile for the homes of even these mites of birds, and a side touch would in a moment destroy these beautiful little dwellings. Two small eggs are usually laid in the soft nests, and when the young birds make their appearance they are bravely defended by the parent birds against the attacks of enemies, even those far larger than themselves. There is much to interest and instruct one in the study of these little birds, although it is usually almost impossible to catch even a glimpse of them, for their flight is so rapid, and they are almost constantly in motion. Their diminutive eyes, peculiar habits and dainty homes render them fascinating little creatures. — M. E. WHITTEMORE, *New York City*.

A TRUE BIRD STORY.

The following letter written in April and received by one of our little readers from her friend in the Adirondac Mountains, gives a true account just as stated, and now we hope to hear from any of our young friends who can tell the name of the bird, and, if possible, describe its habits and relationship and mode of life.

DEAR MARGIE: I have something which will interest you, because you are fond of everything that is lovable. Two weeks ago Dr. L. was coming and going out of our big summer kitchen, and he noticed a little brown, wild bird flying in and out, picking up stray crumbs and looking very cold, for although you are almost in summer we are still gazing on a white ice lake and deep snow in patches. As it lit on the window, Dr. L. thought he would bring it in to me, as a thought for my aching head, and then let it go; but it was so cold and so thin that I begged him to let me keep it until it was warmed and had eaten, so he brought down an old cage from the garret, and I put birdie in, giving it water and oatmeal. The more I looked at the bird the more I desired to keep it, and there was quite a struggle, for I reasoned he will surely die, I don't know what such a wild bird will eat, and it don't

sing; but again I reasoned, the cats, Mr. Tot or Miss Cute, will surely catch it and eat it. So, Margie, I was about a week deciding. Meanwhile, as he was somewhat wild, I kept the cage covered, excepting when I talked to it or fed it, and it became quite quiet. One day, just two weeks after the capture, I hung the cage in the south window, among the flowers, and was reading the last MAGAZINE when, what do you think, that little plain brown bird pecked at the white Oxalis on one side, then nodded to the pink one on the other side, looked approvingly at the blooming Geranium, and broke out in the most wild, weird and sweetest song imaginable. Since that time he sings every day and is as tame as a Canary. Was he thankful at being rescued from cold and hunger? Was it the beautiful flowers that unfastened those song cords? Perhaps both, but he is my wild-woods pet; he eats Canaryseed, Buckwheat, both of which I crush or crack, Oatmeal and Apple, and between times ducks his head in his drinking cup. Mr. Tot and Miss Cute have compromised matters, inasmuch as they know that the cage is closely guarded.

Now, Margie, I will describe my bird, and would like you to tell me, through the MAGAZINE, his name and tribe. Body size of a large, plump Canary, not dumpy; back, head and wings irregularly dashed dark brown and black, head brown with dark dot on the top; tail long, brown, upper streaked with black, under light grey; breast mottled grey and dark brown. Altogether looks like a Thrush, only smaller. Song soft, very sweet, trills and warbles somewhat between American Goldfinch and Canary, but more varied. What is he?—CASTLE RUSTICO, *In the Adirondacs*.

JAPANESE GARDENING.

The Japanese market gardeners supply the city of Yokohama with flowers all the year round without any fire heat, although they have frosts and cold weather several months every year. They employ pits covered with sash for their plants, and protect them at night with mats. It is very certain they must use a great deal of care to select the kinds of plants that will thrive and produce flowers with this treatment.



We are sorry that the letters below could not have appeared sooner. Though space is limited the editor will try to "catch up," so that hereafter all letters received about the time the MAGAZINE is due may find a place in the next number. Otherwise they must lie over. Here is a pleasant letter from Iowa that has the true ring.

I have just received the fourth number of VICK'S MAGAZINE, and feel quite an interest in it. As you have so kindly asked us to write, I made up my mind to do so. I am thirteen years old, and live on a farm of forty beautiful acres, so near Knoxville that I attend the public school. I have always been a lover of flowers, and last summer I had Verbenas, Geraniums, mixed Phlox, Pinks, Salvia, Pæonies and a few other plants. Last fall, mama sent to Mr. VICK for three dozen Tulip bulbs, which are growing nicely now. I am anxious to get acquainted with the club members and hope I soon will.—KIPPIE PEIRCE, Box 265, *Knoxville, Iowa.*

Now we come to a letter that somebody might shake his head over, but we happen to know that every word is true.

Summer before last I was ten years old, and mama and papa took me to a greenhouse, about two miles from town. While I was looking round I found a great big pile of Geraniums that they had thrown away, and I asked the people who owned them if I could have some, and I picked the best ones out and brought them home. I dug up a place clear across the back end of our side yard and put them in, and I had enough to make three long rows. I had lots of fun watering them and keeping the weeds out. They bloomed all the summer long and looked real pretty from the street. I had so many that my sister took a bouquet or two to school almost every day. Last summer I took care of mama's flower borders for her real nicely, and watered them every evening. And once I went to the woods by myself and dug up two or three young trees, and the next morning I dug the holes and set the trees out before anybody was up. I don't know what I shall do this summer; I'd like to make a garden.—A. DOUGLAS INGRAM, *Xenia, O.*

We think that some of the fathers of school girls ought to get together and fence in a bit of ground for flowers near the school houses that are not enclosed. The leisure moments of their children might be worse employed than in cultivating flowers. Hear this girl's experience.

I am going to describe the school ground where I go to school. The house stands in a corner of the woods. One of my school mates and I made a little flower bed, and in it we planted some wild Violets

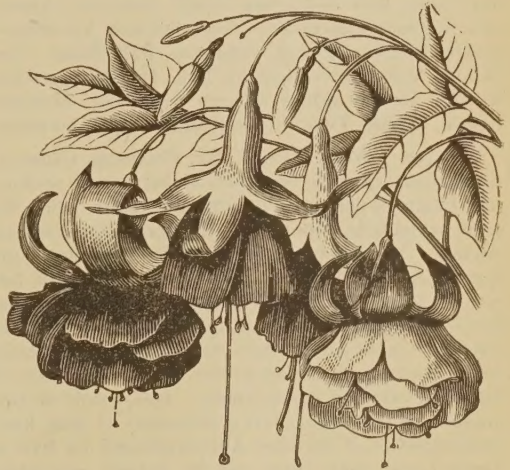
and Daisies and Crowfoot, and pretty soon some pigs came along and rooted them up. And so that is a description of our school ground. I will tell you how we keep Ten-Weeks Stock. We pot them in the fall and put them in the cellar, and in the spring we set them out. Last summer, one that was kept over bloomed all summer, and once I counted on it one hundred and fifty blossoms.—LITTLE I. M. P., Box 176, *Attica, Ind.*

Here is a letter from Ontario, nicely written and spelled for one so young.

I am nine years old. My grandma had a lovely lot of flowers, and nearly all of them got frozen. Among them was a beautiful Calla Lily with one flower just coming out and two more not so far on. We had to cut it down four inches above the pot, but it grew nicely, and has had two more flowers since then. We had some beautiful Fuchsias frozen, and Geraniums, too. My grandma was very sorry and so was I. The winter has been very hard on flowers.—EMMA L. ROBENA BRAY.

All our young folks who have not yet made their little gardens or flower beds, can now get young plants from their older friends and make a beginning in earnest.

FUCHSIA BELLS.



Hearken to the bells, Fuchsia bells, Fuchsia bells;
And what a glorious sight,
How it fills one with delight,
In the merry month of June;
Yes, listen to their tune,

The tintinnabulation that magically swells
From the bells, as they sway, those bells, bells, bells,
As they sway, free in air, bright, glowing Fuchsia
bells. —W. H. W.

ANGLING AND STRAWBERRIES.

Indeed, my good scholar, we may say of angling as Dr. BOTELER said of Strawberries, "Doubtless God could have made a better berry, but, doubtless, God never did," and so, if I might be judge, God never did make a more calm, quiet, innocent recreation than angling.—ISAAC WALTON.



GOVERNMENT REPORTS.—Our thanks are due to C. V. RILEY, Entomologist of the Department of Agriculture, for two valuable reports on Insects; one relates to the Rocky Mountain Locust and the Chinch bug, together with extract from the correspondence of the Division of Entomology on Miscellaneous Insects; the other, to experiments chiefly with kerosene upon the insects injuriously affecting the Orange tree and the Cotton plant. We are also indebted to the War Department for a "Memoir on the use of Homing Pigeons for Military purposes."

KANSAS AGRICULTURE.—The third biennial report of the Kansas State Board of Agriculture is filled with valuable matter, and contains separate maps of each County of the State colored in townships. The Quarterly Report of the same board has an excellent illustrated article on the different kinds of Grasses that have been tested in the State, supplying information that all agriculturists of the State need. The Secretary of the State Horticultural Society authorizes the following list of Apples to be published as most reliable for general culture in Kansas. The varieties are named in the order of their preference: Five Summer Varieties—Early Harvest, Carolina Red June, Red Astrachan, Early Pennock, American Summer Pearmain. Five Autumn Varieties—Blush, Rambo, Lowell, Fameuse, Fall Wine. Ten Winter Varieties—Winesap, Ben. Davis, Jonathan, Rawles Genet, White Winter Pearmain, Missouri Pippin, Willow Twig, Rome Beauty, Gilpin, Dominic.

RUSSIAN FRUITS.—From Mr. CHARLES GIBBS, of Abbotsford, Quebec, we received his Report on Russian Fruits, a pamphlet of fifty-five pages, being the same as made by him to the Montreal Horticultural Society. Mr. GIBBS accompanied Prof. BUDD, of the Agricultural College of Ames, Iowa, to Russia, last year, to learn as much as possible in regard to the fruits in those portions of that country which are similar or more severe than the northwestern States and Canada, with a view to the introduction here of the most valuable hardy kinds. One result of this mission of investigation is a collection of four hundred varieties of Russian Apples planted for trial at Ames, Iowa; their value can be known only some years hence. The present report notices and describes thirty-seven varieties of Apples, nineteen of Pears, five of Cherries, several of Plums, a Musk Melon and a Water Melon.

TENNESSEE.—A "Hand-Book of Tennessee" has just been issued, prepared by A. W. HAWKINS, formerly Commissioner of Agricultural Statistics, Mines and Immigration, assisted by HENRY E. COLTON, Geologist. Valuable information is here supplied in relation to the agricultural, mining and manufacturing resources of that State. Those interested therein can procure the work on application to A. J. McWHORTER, Commissioner, Nashville, Tennessee.

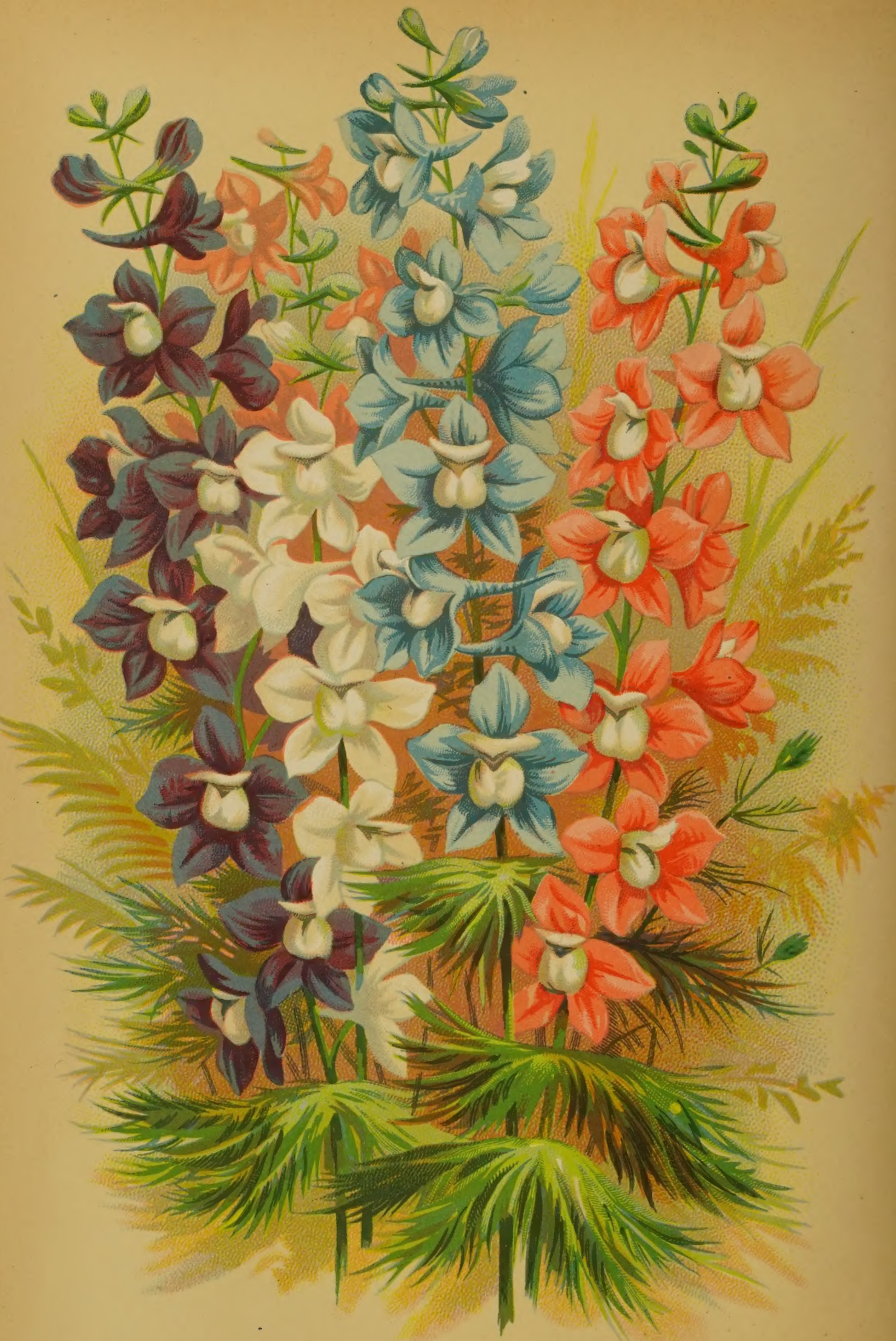
TRANSACTIONS OF THE FRUIT GROWERS ASSOCIATION and International Show Society, of Nova Scotia, indicate a lively interest in fruit growing in that Province, and a portion of that region appears to be particularly well adapted to the production of fine Apples, for which it has already achieved an enviable foreign reputation, as much, probably, on account of good and honest packing, as the quality of its fruit.

SOME GIFTS.

We have the pleasure of acknowledging the receipt, through the kind services of our frequent contributor from the antipodes, Mr. S. W. VINEY, of a fine collection of pressed specimens of Australian and New Zealand Ferns, from W. R. GUILFOYLE, Director of the Botanic Gardens at Melbourne, Australia. It is needless to say that we prize them exceedingly. Mr. GUILFOYLE with much generosity has also sent us seeds of sixty-five species of Australian and New Zealand plants. These seeds, which are from plants worthy of cultivation, we offer to any of our readers who may apply for them, sending a few varieties to each one. They are nearly all of them from plants that will require greenhouse cultivation in this country, and we advise those who may not have all the proper facilities to care for tender plants not to send for them, as it would be a waste of time to give attention to them during the mild season, only to see them perish in the fall. We shall gladly share with all who will give them suitable care, and hope ultimately to hear the result attending the trials. No one need have any delicacy in applying for them, for they are freely offered, and those interested in novelties will be sure to receive something new and we believe valuable. Each species will be accompanied with its correct name. Requests by postal card or otherwise will receive attention.

PLANTS FOR NAMES.

At this season of the year, especially, we receive many specimens of plants for names. We are pleased to give all the assistance we can in this way, but often are unable to do so for the reason that the specimens are unrecognizable when received. They are frequently sent full of moisture in close boxes, and perhaps damp moss added, and being a number of days on the road are ruined when received. Some send only a leaf or two, without a flower, or any explanation or description. It should be particularly stated whether the plant is wild or cultivated; it is well to state as fully as possible what is known about it. Specimens of leaves and flowers carefully pressed dry are best in most cases, and can be most easily sent.



ANNUAL LARKSPUR.